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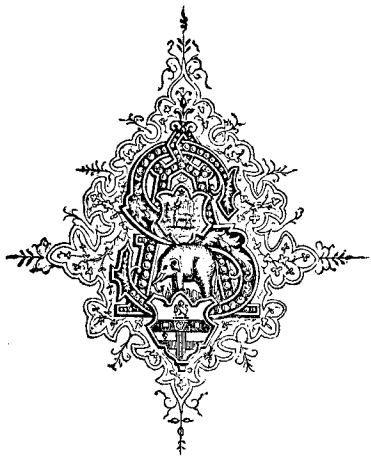

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THE ROYAL ASIATIC SOCIETY.

ART. I.—*The Kushān, or Indo-Scythian, Period of Indian History, B.C. 165 to A.D. 320.* By VINCENT A. SMITH, M.R.A.S.

I. *Introductory.—The rival theories.—List of inscriptions.*

THE four epochs into which the political history of ancient Northern India is naturally divided are marked by four imperial dynasties—(I) the Maurya, (II) the Kuṣana or Kushān,[1] (III) the Gupta, and (IV) the Rājpūt line of Harṣavardhana. The date of the Maurya, the earliest of the four dynasties, was practically determined more than a century ago by Sir William Jones, and we know that Candra Gupta Maurya, the first emperor of India, and grandfather of Aśoka, ascended the throne in or about the year B.C. 321.

After a debate which had lasted for half a century, Dr. Fleet in 1888 settled beyond a doubt the beginning of the Gupta era, and at the same time determined the accession of the

[1] In Indian inscriptions and Kharoṣṭhī coin legends the name is written Kuṣana or Guṣana. The spelling Kushān is authorized by the legends on certain Sassanian coins. (Drouin, *Rev. Num.*, 1896, p. 170.) The coin legends in Greek supply other variants.

founder of the third imperial dynasty, that of the Guptas, as falling in the year A.D. 320. The researches of Mr. Cecil Bendall and other scholars simultaneously determined the accession of Harṣavardhana and the establishment of his era as having occurred in A.D. 606. The chronological limits of three out of the four epochs of early Indian history were thus definitely demarcated, and a great advance was made in the formidable undertaking of building up a firm chronological framework for the story of ancient India, which had been lost for ages, and is being slowly rediscovered by the labours of modern scholars. But, although so much had been done, a huge gap of more than five centuries between Aśoka Maurya (B.C. 272–231) and the founder of the Gupta dynasty remained open and unfilled by solid historical fact. A superstructure of real history cannot be built save upon a foundation of ascertained chronology.

For many years past it has been a matter of common knowledge that, during the five centuries referred to, Northern India had been more than once overrun and more or less subjugated by foreign invaders from the north-west, commonly called Indo-Scythians. Coins, inscriptions, and tradition concurred in indicating as the most powerful and important of these foreign invaders a Turkī dynasty, comprising at least five sovereigns. Of these sovereigns the most famous is Kaniṣka, whose name is intimately associated with the history of the newer Buddhism. But the date of Kaniṣka, and in consequence the relation of that monarch, as well as that of his predecessors and successors, to the facts of known history, remained a mystery. Conjecture was busy, and assigned for the accession of Kaniṣka various dates ranging over a period of more than three centuries and a quarter, from B.C. 57 to A.D. 278.

Sir Alexander Cunningham for a long time held to the belief that Kaniṣka's accession should be dated from the so-called Vikrama era, B.C. 57. When that belief was proved to be untenable, the veteran archæologist, after considerable hesitation, persuaded himself that the Kuṣana inscriptions must be regarded as dated in the Seleucidan era,

and that the accession of Kaniṣka should be placed about A.D. 80. M. Sylvain Lévi, attacking the problem from the side of the Chinese historians, would place the beginning of the reign of Kaniṣka a few years before the Christian era, or about B.C. 5. M. Boyer, working mainly on the same lines, but utilizing other kinds of evidence to which M. Lévi paid slight regard, is inclined to date the commencement of Kaniṣka's rule later than A.D. 90. Two Indian scholars, Messrs. R. G. and D. R. Bhāndārkar, have lately propounded the startling theory that Kaniṣka did not begin his reign until A.D. 278. Another guess was to the effect that the desired date might be deduced by adding a century to the Vikrama era 57 B.C., with the result that Kaniṣka's accession would fall in about A.D. 43. I am myself responsible for an ill-founded conjecture that A.D. 60 or 65 might be the desired date. Some scholars inclined to the view that Kaniṣka had founded a special era of his own, of which the beginning remained to be ascertained. But for twenty years past the theory of Mr. Fergusson and Professor Oldenberg that Kaniṣka was the founder of the Śaka era in A.D. 78, and came to the throne in that year, has been generally accepted. In fact, this theory, which really rests on very unsubstantial arguments, has been commonly regarded by English writers as a truth substantially established, or at least as sufficiently probable to warrant its adoption as the chronological basis for Indian history between the Maurya and the Gupta periods.[1]

[1] For the Vikrama theory, see Cunningham, *Reports*, ii, 68, note; iii, 30, etc. The Seleucidan theory is expounded in the same author's "Book of Indian Eras," 42. M. Sylvain Lévi has ingeniously explained his hypothesis in "Notes sur les Indo-Scythes" (*J.A.*, Nov.–Dec., 1896, Mai–Juin, 1897; reprinted 1897, see especially pp. 62, 66, 82).

M. Boyer, with most of whose reasonings I agree, published his excellent paper "L'Époque de Kaniska" in the *J.A.*, Mai–Juin, 1900.

Mr. D. R. Bhāndārkar developed his peculiar views in a paper read before the Bombay Branch of the Royal Asiatic Society, on the 19th October, 1899, entitled "A Kushana Stone-inscription and the question about the origin of the Śaka Era." These views were adopted by Mr. R. G. Bhāndārkar, in his interesting essay, also published in the Journal of the Bombay Society, and reprinted in 1900, which is entitled "A Peep into the Early History of India from the

The bewildered student of Indian antiquities is thus confronted with nine different theories of the Kuṣana chronology, proposing dates for the accession of Kaniṣka ranging from B.C. 57 to A.D. 278, a period of 335 years. I fear that I shall hardly be thanked for adding a tenth to the collection of rival theories, but may plead in extenuation that my suggestion is based upon a prolonged study of the question, and is supported by arguments which take into consideration every kind of evidence known to me. If my solution is not irreconcilable with any ascertained fact, and results in a reasonable system of chronology which harmonizes Indian history with the history of Rome, Persia, and China, I think I may fairly claim to regard it as proved, or, at least, as highly probable.

I do not propose to enter upon a tedious formal examination of the nine rival theories. The objections to them will sufficiently appear in the course of the following discussion, but I may observe here that indisputable numismatic facts, not merely "numismatic theories," for which Mr. Bhāndārkar has such slight respect, render untenable both the early theory of Cunningham placing the accession of Kaniṣka in B.C. 57, and M. Sylvain Lévi's recent theory which dates that event in about B.C. 5. Two relevant numismatic facts are absolutely certain, namely, that Kadphises I struck copper coins on

foundation of the Maurya Dynasty to the downfall of the Imperial Gupta Dynasty, B.C. 322 – *circa* 500 A.D."

Mr. Rapson writes in "Indian Coins," p. 18: "Regarding another possibility, viz., that the dates of Kaniṣka and his successors have to be referred to the second century of the era used by Śodāsa, Liako Kuśuluka, and others, see *W.Z.K.M.*, ix, p. 173 f." See also Mr. Rapson's remarks in *J.R.A.S.*, April, 1900, p. 389. My guess that A.D. 60 or 65 might prove to be the desired date was hazarded in my recently published work, "The Jain Stūpa and other Antiquities of Mathurā," pp. 5, 46. I withdraw it unreservedly. The conjecture that Kaniṣka founded a special era of his own has been often mentioned, but has never been worked out in a definite shape. Fergusson's and Oldenberg's theory is fully stated in *I.A.*, x, 213, in the article entitled "On the Dates of Ancient Indian Inscriptions and Coins," translated from the eighth volume of the *Zeitschrift für Numismatik* (Berlin, 1881). Professor Gardner (*B.M. Catal., Indo-Scythian Kings*, p. 2) was convinced that this theory "settled the matter," and that no numismatist could hesitate to accept it. M. Boyer's article above quoted, and his paper "Nahapāna et l'ère Śaka" in *J.A.*, Juillet-Août, 1897, as well as the remarks of the Messrs. Bhāndārkar and M. Lévi, demolish the theory.

which the king's head is a copy of the head on the coins either of the later years of Augustus or of his successor Tiberius, and that Kadphises II issued a gold coinage agreeing in weight with the *aurei* of the early Roman empire. Augustus died in A.D. 14. Both Kadphises I and Kadphises II preceded Kaniṣka, and both certainly enjoyed long reigns. The necessary inference is that the accession of Kaniṣka must be considerably later than A.D. 14.

The kings Kaniṣka (Kaněṣka), Huviṣka (Hukṣa, Huṣka), and Vāsudeva (Vāsuṣka, Juṣka) are known to have been members of the Kuṣana clan of the Yueh-chi, an originally nomad horde,[1] and to have reigned over Northern India and the regions now known as Afghānistān in the order named.

The dated inscriptions referable to the reigns of these three kings number 71, of which all but one bear dates in figures below 100. The seventy dates in figures below 100 range from 4 to 98. Out of these seventy inscriptions 26 contain the name of one or other of the kings. Seven records mentioning the king's name belong to the reign of Kaniṣka, and extend from the year 5 to the year 28. The twelve inscriptions which mention Huviṣka range from the year 29 to the year 60, and the seven inscriptions of Vāsudeva extend from the year 74 to the year 98.

No less than 56 of the seventy inscriptions bearing dates below 100 come from Mathurā on the Jamnā, and of these 43 are Jain inscriptions from the Kaṅkālī or Jainī mound. The remaining 27 inscriptions come from various localities, as

[1] The Yueh-chi were not Mongoloid in race. The Chinese authors describe them as having a pink and white complexion, and the portraits of the kings on their coins exhibit large noses. They have been "wrongly assimilated to the Tochari and to the polyandric Ye-ta or Ephthalitai, which are different races altogether. These confusions were set right in the first case by Professor G. de Vasconcellos-Abreu (*Le Muséon*, 1883), and in the second by Mr. E. Specht (*Journal Asiatique*, 1883)" (De Lacouperie, in *Academy*, Dec. 31, 1887).

The modern Chinese pronunciation of the name is said to be Yuèti (Kingsmill). It is given as Yueh-ti by M. de Lacouperie, who states that the original form was Gwet-ti. M. Lévi and other French scholars write Yue-tchi, or Yué-tchi. English scholars incline to the form Yueh-chi, which I have adopted.

Mr. Kingsmill's interesting and valuable papers, "The Migrations and Early History of the White Huns, principally from Chinese sources" (*J.R.A.S.*, May, 1878), and "The Intercourse of China with Eastern Turkestan and the adjacent countries in the second century B.C." (*ibid.*, January, 1882), unfortunately confound the Yueh-chi with the White Huns or Ephthalites.

follows:—Rāmnagar (Ahichatra) in Rohilkhaṇḍ, 4; Yusufzai country (Ohind, Zeda), 2; Bodh Gayā in Bihār; Alikā (position unknown); Kāman in Bharathpur State; Mānikyāla in Rāwalpindī District, Pañjāb; Fatehjang or Chāsa in same district; Sāñci in Central India; Suë Vihār in Northern Sindh; and Wardak, west of Kābul—one each (14 in all)—besides 13 from sites at Mathurā other than the Kaṅkālī mound, of which 11 are Buddhist and 2 Jain. All the seventy inscriptions are either Buddhist or Jain. The Jain records, 45 in number, all come from Mathurā; the 25 Buddhist records include 11 from Mathurā and 14 from other places.

All the seventy inscriptions are records of pious gifts or dedications by private persons; not one is official. The private donors used their discretion as to the form of the inscription. Very often they mentioned the name of the reigning king in order to express the date with precision, but in several dated inscriptions, which are complete, the donors did not take the trouble to give the king's name, and simply specified the date in an unnamed era. When the king's name is mentioned, each donor pleased himself as to the formula of the royal style. Some writers used the simplest possible formula, while others preferred to state the kingly titles at length. The vagaries in the use of the royal style practised by private donors are of no historical importance. In another matter also the private donor reserved his liberty of expression. Three modes for the notation of the months were then in use, and the persons who recorded the seventy inscriptions in question used all three, just as each preferred. Only two of them, namely, one (No. 8) at Suë Vihār in Sindh, and the other (No. 43) at Wardak, west of Kābul, described the months by their Macedonian names. Three donors, namely, those at Zeda and Ohind in Yuzufzai and at Mānikyāla in the Pañjāb (Nos. 9, 14, 48), used the ordinary Hindū names of the months, Āṣāḍha, Kārttika, Chaitra. All the others made use of the ancient division of the year into three seasons—the winter, hot season, and rains—of four months each, and

described the months by their numbers from one to four in each season, without names. The days of the month were in any case, however the months might be designated, reckoned continuously from 1 to 30, and not by lunar fortnights, as is now the practice. The slight significance of the method of notation for the months is shown by the fact that, while the Suë Vihār inscription in Sindh (No. 8) and the Zeda inscription in Yusufzai (No. 9) are both explicitly dated in the reign of Kaniṣka and in the year 11, the writer of the former uses the Macedonian name Daisios to designate the month, whereas the writer of the second uses the Hindū name Āṣāḍha.

The special case of inscription No. 71, dated in the year 29 [?9], will be considered in due course, with the cases of other inscriptions bearing dates in numbers higher than 100. I address myself in the first instance to the problem of determining the era used in the series of seventy inscriptions ranging from the year 4 to the year 98.

This long-standing problem I propose to solve by referring this series of dates to the Laukika or popular era, and interpreting them as equivalent to

Inscriptions.	*Laukika.*	*Kālī Yuga.*	*A.D.*
4	[32]04	3229	128–129
98	[32]98	3323	222–223

The following list gives full details and references for 75 dated inscriptions, including 5 bearing dates in figures higher than 100.

LIST OF DATED KUṢANA (KUSHĀN) INSCRIPTIONS.

ABBREVIATIONS.

B.	Buddhist.
Br.	Brāhmī script.
E.I.	Epigraphia Indica.
I.A.	Indian Antiquary.
J.	Jain.
J.A.	Journal Asiatique.
J.I.A.	Journal of Indian Art and Industry.
Kh.	Kharoṣṭhī script.
N.C.	Numismatic Chronicle.
Reports.	Cunningham's Reports of the Archæological Survey of India.
U.P.	United Provinces of Agra and Oudh, formerly the North-Western Provinces (N.W.P.).

Serial No.	Year.	King.	Locality.	Reference.	Remarks.
1	4	——	Mathurā, Kaṅkālī	E.I., ii, 201, No. xi	J.; 1st mo. summer, 20th day; Br.
2	5	——	,, ,,	,, ,, No. xii	J.; 4th mo. summer, 5th day; Br.
3	,,	——	,, ,,	Reports, iii, 30, pl. xiii, No. 2	J.; 1st mo. winter, 12th day; Br.
4	,,	——	,, ,,	Reports, iii, 31, pl. xiii, No. 3	J.; 4th mo. winter, 20th day; Br.
5	,,	Kaniṣka	,, ,,	E.I., i, 381, No. i	J.; 1st mo. winter, 1st day; Br.
6	7	,,	,, ,,	E.I., i, 391, No. xix	J.; 1st mo. winter, 10th day; Br. (title *Ṣāhi* used).
7	9	,,	,, ,,	Reports, iii, 31, pl. xiii, 4	J.; 1st mo. —, 5th day; Br.
8	11	,,	Suë Vihār, near Bahāwalpur in Northern Sindh	I.A., x, 324 (Hoernle, a perfect edition with facsimile); I.A., xi, 128 (Bhagvān Lāl, an imperfect edition)	B.; Daïsika (Daisios), 28th day; Kh.
9	,,	,,	Zeda (Ziddih), near Ohind in Yusufzai country	Reports, v, 57, pl. xvi; Senart, *Notes d'Epigr. Ind.*, iii, 28	B.; Aṣada (Āṣāḍha), 28th day; Kh.
10	15	——	Mathurā, Kaṅkālī	E.I., i, 382, No. ii	J.; 3rd mo. summer, 1st day; Br.
11	18	——	Rāmnagar (Ahichatra in Bareli District, U.P.)	Führer, Progress Report, 1891–2	J.; Br.

12	,,	——	Mathurā, Kaṅkālī		E.I., ii, 202, No. xiii	J.; 4th mo. summer, 3rd day; Br.
13	,,	——	,,	,,	E.I., ii, 202, No. xiv	J.; 2nd mo. rains, 11th day; Br.
14	,,	Kaniṣka	Mānikyāla in Rāwalpindī District, Pañjāb; (Ventura's *stūpa*)		Reports, ii, 162, pl. lxiii; Senart, J.A. for 1896, p. 25	B.; Kārttika, 20th day; Kh.
15	19	——	Mathurā, Kaṅkālī		E.I., i, 382, No. iii	J.; 4th mo. rains, 10th day; Br.
16	20	——	,,	,,	E.I., i, 395, No. xxviii; Reports, iii, 31, No. 6	J.; 1st mo. hot season, 25th day; Br.
17	?,,	——	,,	,,	E.I., i, 383, No. iv	J.; 3rd mo. hot season, 10th day; Br.
18	22	——	,,	,,	E.I., i, 395, No. xxix; Reports, x, 32, No. 7	J.; 1st mo. hot season, — day; Br.
19	?,,	——	,,	,,	E.I., i, 391, No. xx	J.; 2nd mo. hot season, 7th day; Br.
20	25	——	,,	,,	E.I., i, 384, No. v	J.; 3rd mo. winter, 20th day; Br.
21	28	Kaniṣka	,,	old jail mound	Growse, in I.A., vi, 217, No. 1	B.; 3rd mo. winter, — day; Br. (king's name incomplete, but decipherable).
22	29	Huviṣka	,,	Kaṅkālī	E.I., i, 385, No. vi	J.; 2nd mo. winter, 30th day; Br. (king's name incomplete, but practically certain; the associated inscriptions are Huviṣka's).
23	?,,	,,	,,	,,	E.I., ii, 206, No. xxvi	J.; month and day lost; king's name spelt Hukṣa; date not quite certain; Br.
24	31	——	,,	,,	E.I., ii, 203, No. xv	J.; 1st mo. rains, 10th day; Br.

Serial No.	Year.	King.	Locality.	Reference.	Remarks.
25	31	——	Rāmnagar (Ahichatra)	Führer. Progress Report, 1891–92	B.; 1st mo. rains, 10th day; Br.
26	32	——	Mathurā, Kaṅkālī	E.I., ii, 203, No. xvi	J.; 4th mo. winter, 2nd day; Br. (inscription complete, no king's name).
27	33	Huviṣka	,, Chaubārā	Growse, in I.A., vi, 217	B.; 1st mo. hot season, 8th day; Br.
28	35	——	,, Kaṅkālī	E.I., i, 385, No. vii	J.; 3rd mo. rains, 10th day; Br.
29	39	Huviṣka	,, ,,	Reports, iii, 32, No. 9, pl. xiv, 9; I.A., vi, 218	J.; 3rd mo. winter, 11th day; Br. (on abacus of elephant capital).
30	44	,,	,, ,,	E.I., i, 387, No. x	J.; 3rd mo. hot season, 2nd day; Br. (king's name Huvikṣa).
31	45	,,	Ālikā	J. Bo. Br. R.A.S., Sept. 1901	B.; 3rd mo. rains, 15th day; Br.
32	,,	,,	Mathurā, Kaṅkālī	E.I., i, 387, No. x	J.; 3rd (?) mo. rains (?), 17th day; Br.
33	47	Huviṣka	,, old jail mound	Reports, iii, 33, pl. xiv, 12	B.; 4th mo. hot season, 4th day; Br.
34	,,	——	,, ,,	,, ,, ,, 11	B.; 3rd mo. hot season, 5th day; Br.
35	,,	——	,, ,,	,, iii, 34 ,, 13	B.; 4th mo. hot season, 25th day; Br.
36	,,	——	,, ,,	,, ,, ,, 14	B.; 4th mo. rains, 11th day; Br.
37	48	Huviṣka	,, Kaṅkālī	,, ,, ,, 15	J. (?.; 4th mo. winter, 5th day; Br.

38	50	——	,, ——	Growse, in I.A., vi, 219, No. 11; and "Mathurā," 3rd ed., 165	B.; 3rd mo. winter, 2nd day; Br.
39	,,	——	,, Kañkālī	E.I., ii, 203, No. xvii	J.; 1st (?) mo. winter, — day; Br.
40	,,	——	Rāmnagar (Ahichatra)	Führer, Progress Report, 1891–92	J.; 2nd mo. winter, 1st day; Br.
41	?,,	——	Mathurā, Kañkālī	E.I., ii, 209, No. xxxvi	J.; (?) 2nd mo. winter, 1st day; Br.
42	51	Huviṣka	,, Jamālpur	Growse, "Mathurā," 3rd ed., 116	? B.; 1st mo. winter, — day; Br.
43	,,	,,	Wardak, 30 m. W. of Kābul	Reports, ii, 67; Prinsep's Essays, i, 162, pl. x; "Coins of Ancient India," 37	B.; month Artemisios; Kh. (Cunningham's reading of the date).
44	52	——	Mathurā, Kañkālī	E.I., ii, 203, No. xviii	J.; 1st mo. winter, 25th day; Br.
45	54	——	,, ,,	E.I., i, 391, No. xxi	J.; 4th mo. winter, 10th day; Br.
46	57	——	,, Manoharpur	E.I., ii, 210, No. xxxviii; Growse, in I.A., vi, 219, No. 5	J.; 3rd mo. winter; Br. (Bühler, I think, is mistaken in referring this inscription to the Gupta era).
47	60	Huviṣka	,, Kañkālī	E.I., i, 386, No. viii; *Ind. Palæog.*, Table ix	J.; 4th mo. winter, 10th day (the king's name is spelt Huvaṣka); Br.
48	61	——	Ohind on Indus	Reports, v, 58; Senart, "Notes d'Epigraphie Indienne," iii, 45	B. (?); Chaitra, 8th day; Kh.
49	62	——	Mathurā, Kañkālī	E.I., ii, 204, No. xix	J.; 2nd mo. rains, 5th day; Br.
50	,,	——	,, Rāṇī kī maṇḍī	Reports, xx, 37, pl. v, 6	J.; 3rd mo. rains, 5th day; Br.

Serial No.	Year.	King.	Locality.	Reference.	Remarks.
51	64	——	Bodh - Gayā (colossal statue of Buddha)	N.C., 1892, 49; Reports, xvi, p. iv	B.; an impression of a medal of Huviṣka, with usual legend and head on both sides, was found under the throne (*Reports*, xvi, p. iv). Several silver punch-marked coins and one copper ditto included in the deposit; Br.
52	68	——	Fatehjang or Chāsa, in the Rāwalpindī District, Pañjāb	"Coins of Ancient India," 37	Kh.; no other details; ? B. (site noticed in *Reports*, xiv, 24; perhaps identical with the short inscription of the same year edited by Senart in *Notes d'Épigr. I.*, p. 27—"the 16th day of Prauṣṭhapada").
53	74	Vāsudeva	Mathurā, old jail mound	Reports, iii, 32, pl. xv, 8; N.C. for 1892, 50, note	B.; 1st mo. rains, 30th day; Br.
54	,,	——	Rāmnagar (Ahichatra)	Führer, Progress eport, 1891–92	J.; Br.; no other details.
55	,,	——	Kāman in Bharathpur State	E.I., ii, 212, No. xlii	B.; 1st mo. hot season, 15th day; Br.
56	76	Vāsudeva	Mathurā, Katrā mound	Führer, Progress Report, 1895–96	B.; a short dedicatory inscription in procession path of a *stūpa* embedded in the mound, recording repairs in the reign of Vāsuṣka; Br.
57	78	Vāsudeva	Sāñci in Central India	E.I., ii, 369, plate-	B.: 1st mo. winter, 5th day; Br. (the king's name is spelt Vāsuṣka).

58	79	——	Mathurā, Kañkālī	E.I., ii, 204, No. xx	J.; 4th mo. rains, 20th day; Br.
59	80	Vāsudeva	,, ,,	E.I., i, 392, No. xxiv	J.; 1st mo. rains, 10th day; Br.
60	81	——	,, ,,	E.I., ii, 204, No. xxi	J.; 1st mo. rains, 6th day; Br.
61	83	Vāsudeva	,, ,,	Reports, iii, 34, pl. xv, 16	J.; 2nd mo. rains, 10th day; Br.
62	,,	——	,, old jail mound	,, ,, ,, 17	B.; 2nd mo. rains, 25th day; Br.
63	?85	——	Mathurā, Kañkālī	E.I., i, 392, No. xxii	J.; 2nd mo. hot season, 18th day; Br. (Bühler reads ? 95).
64	86	——	,, ,,	E.I., i, 388, No. xii	J.; 1st mo. winter, 12th day; Br.
65	87	——	,, ,,	E.I., i, 388, No. xiii	J.; 1st mo. hot season, ? 20th day; Br. (the unit may be 8).
66	,,	Vāsudeva	,, ,,	Reports, iii, 35, pl. xv, 18	J.; 2nd mo. winter, 30th day; Br. (the king has title *Śāhi*).
67	90	——	,, ,,	E.I., ii, 205, No. xxii; Reports, iii, 35, pl. xv, No. 19	J.; rains; Br.
68	93	——	,, ,,	E.I., ii, 205, No. xxiii	J.; rains; Br.
69	98	——	,, ,,	E.I., ii, 205, No. xxiv	J.; 1st mo. winter, 5th day; Br.
70	,,	Vāsudeva	,, ,,	Reports, iii, 35, pl. xv, 20	J.; 4th mo. rains, 11th day; Br.
71	299	*mahārāja rājātirāja* (probably Vāsudeva)	,, ,,	Führer, Progress Report, 1895–96; Bühler	J.; 2nd mo. winter, 1st day; Br. (unit of year not quite certain; translated by Bühler in an extract for which I have not exact reference). Probably referable to the same, *i.e.* Laukika, era as the foregoing.

Serial No.	Year.	King.	Locality.	Reference.	Remarks.
72	122	maharaya Guṣana (probably Kadphises I).	Panjtār in Yusufzai	Reports, v, 61, pl. xvi	? B.; Śravana, 1st day; Kh. (original lost, known only from an imperfect transcript). This inscription is probably to be referred to an era equivalent, or nearly equivalent, to the Vikrama era, B.C. 57. On this assumption the date is equivalent to A.D. 65.

SUPPLEMENT.

Serial No.	Year.	King.	Locality.	Reference.	Remarks.
73	113	——	Kaladara Nadī in Swāt Valley	J.I.A., Jan. 1900, p. 89	B.; Śravana, 20th day; Kh. (dedication of a tank by Theodore).
74	318	——	Loriyān Tangai in Swāt Valley, on northern slope of Shāhkoṭ Pass	,, ,,	B.; Prauṣṭhāpada, 27th day; Kh.
75	384	——	Hashtnagar, 18 m. N.E. from Peshāwar	,, ,, and *ibid.*, April, 1898, pl. v; I.A., xx, 394	B.; Prauṣṭhāpada, 5th day; Kh. (the date is certainly 384).

These three inscriptions are probably dated in an era equivalent, or nearly equivalent, to the Vikrama era, B.C. 57. The dates, on this assumption, may be taken as corresponding to A.D. 56, 261, 327. The first thus falls in the reign of Kadphises I.

II. *The Laukika Era.*

The best account of the Laukika era is that given by Cunningham in his "Book of Indian Eras," pp. 6–17, which is based on enquiries made locally by him in Kaśmīr and the neighbouring countries, as well as on the literary evidence of Abū Rihān Albīrūnī (A.D. 973–1048) and of certain Hindū writers. According to Albīrūnī, who asks for the indulgence of his readers on account of the imperfection of the information supplied to him, "common people in India date by the years of a *centennium*, which they call *samvatsara*. If a *centennium* is finished, they drop it, and simply begin to date by a new one. This era is called *lokakāla*, *i.e.* the era of the nation at large." The learned Muhammadan astronomer then proceeds to point out that in different parts of India the initial month of the year differed. "All the people," he says, "who inhabit the country between Bardarî and Mârîgala [*i.e.* Taxila][1] begin the year with the month Kârttika" [Oct.–Nov.].[2]

Astronomers, when using the Śaka era (A.D. 78), as well as the people of Kaśmīr and Multān, began the year with the new moon of the month Caitra (March–April). The inhabitants of Kanīr, a region conterminous with Kaśmīr, preferred to begin the year with the month Bhādrapada (August–September). A fourth computation, according to which the year began in the month Mārgaśīrṣa (November–December), found favour with "the people living in the country Nîrahara, behind Mârîgala, as far as the utmost frontiers of Tâkeshar and Lohâvar, [who] begin the

[1] "Alberuni's India," transl. Sachau, i, 302. My quotations are from this work. Cunningham necessarily used Reinaud's "Fragments Arabes et Persans."

[2] Minayeff ("Recherches sur le Bouddhisme," p. 229, note) points out that the Śaka year began with Caitra, whereas the Buddhists used the reckoning by the three seasons, in which the year began with winter. He cites Yaśomitra as saying: सर्वबौद्धानां हेमन्तः प्रथम ऋतुः. The evidence above summarized proves that Buddhist practice varied. Cunningham's table of the Laukika era is based on the Kaśmīr practice, which began the year with Caitra.

year with the month Mârgaśîrsha . . . . The people of *Lanbaga, i.e.* Lamghân, follow their example. I have been told by people of Multân that this system is peculiar to the people of Sindh and Kanoj, and that they used to begin the year with the new moon of Mârgaśîrsha, but that the people of Multân only a few years ago had given up this system, and had adopted the system of the people of Kashmîr, and followed their example in beginning the year with the new moon of Chaitra." Albîrûnî then explains the equation of the Śaka and Laukika years as calculated by Durlabha, an astronomer of Multān.[1]

So far as is known, the use of the Laukika era, also called the Pahāṛī, or Hill era, and the Saptarṣi (Satrikhi, Haft Rikhesar) era, or cycle of the Seven Ṛṣis, the stars of the Great Bear, is now confined to Kaśmīr, the Kāngrā Valley, and some small native states to the south-east of Kaśmīr. The *praśasti* inscriptions at Baijnāth in the Kāngrā District equate the dates Śaka 726 and Laukika 80, *i.e.* 3880, equivalent to A.D. 804–5.[2] These inscriptions are, I think, the earliest hitherto recognized as being dated in the Laukika era. But the use of the era goes back to very early times. Cunningham observes that, however obscure may be the origin of the cycle of the Seven Ṛṣis, "there is no doubt about its antiquity, as both Varâha Mihira and Bhattotpala refer to the description of it given by Vriddha Garga, whose date is fixed by Dr. Kern to the first century B.C." Cunningham further shows good reason for believing that the cycle of the Seven Ṛṣis was in use as early as the time of Alexander the Great. Albîrûnî's testimony proves conclusively that the era of this cycle was in ordinary use by the "common people" in North-Western India in A.D. 1000, and that its employment was not confined to its present limits, but extended at least to Multān and Sindh.

[1] "Alberuni's India," transl. Sachau, ii, 8, 9, 54.

[2] "Book of Indian Eras," p. 6; *Epigraphia Indica*, i, 97–118, especially 103. The Laukika era is not expressly named in the inscriptions, but is undoubtedly referred to. If Dr. Fleet is right, as he probably is, in reading the Baijnāth Śaka date as 926, the Laukika equivalent is 4080 = A.D. 1004–5.

The very name Laukika, or 'popular,' indicates that the era was widely known.

The cycle of the Seven Ṛṣis consists of 27 centuries, or 2,700 years, during which period the stars of the Great Bear are supposed to perform certain motions among the 27 constellations known as the 'lunar mansions.' The fact that the supposed motions are purely imaginary did not disturb Hindū astronomers, who, as Albīrūnī observes, had "a way of mixing up scientific questions with religious traditions" (*Sachau*, i, 393). The era is a modification of the Kālī Yuga era, and Laukika dates are converted into Kālī Yuga dates by the addition of 25. In practice, the Laukika dates are written in tens and units only, the hundreds and thousands being understood. For example, the first Laukika date given by Kalhaṇa in the Rāja Taraṅginī is the year 89, by which he means the year 3899, equivalent to A.D. 813–814. The next date mentioned is the year 26, which is to be read as 3926.

The expression of Albīrūnī—that "common people in India date by the years of a *centennium* . . . . If a centennium is finished, they drop it, and simply begin to date by a new one,"—seems to be the origin of the current loose statements that the calculation was made by "leaving out the hundreds, which was the common Indian mode of reckoning the year of the Saptarshi-kâl," and that "the omission of the hundreds . . . . was a common practice in India in reckoning the *Sapt Rishi kâl*, or 'Era of the Seven Rishis.'"[1]

No such mode or practice ever existed. The actual practice was and is very different, and requires the omission of both thousands and hundreds. The year 3899 is actually written as 99, and might conceivably be written as 899, with the omission of the thousands, but it could not possibly be written as 3.99, omitting the hundreds only. This observation is fatal to the theories which seek to explain the Kuṣana dates 4 to 98, as meaning 404 to 498 of the Seleucidan era, 204 to 298 of the Śaka era, and so forth. There is no

[1] Cunningham: "Book of Indian Eras," p. 41; and *N.C.* for 1892, p. 44.

evidence that the year 98 ever meant either 298 or 498, although it might mean 3298 or 2498, or any other figure in thousands and hundreds ending with 98.

The evidence that has been cited leaves no doubt that the use of the ancient Laukika era was once widely diffused in Northern India. The dominions of the great Kuṣana kings included the Pañjāb, Sindh, and Afghānistān, and there is no difficulty, so far as the territorial extension of the Laukika era is concerned, in supposing that the Suë Vihār inscription near Bahāwalpur in Northern Sindh dated in the year 11 in the reign of Kaniṣka, the Zeda inscription in the Yusufzai country dated in the same year and reign, the Ohind inscription dated in the year 61, and the Wardak vase inscription dated in the year 51 should all be interpreted as referring to the Laukika era. I believe that era to have been commonly used in Kaniṣka's time all over Northern India, and any inscription of the Kuṣana period, recorded either in Northern India or by a native of Northern India, the date of which is below 100, may reasonably be supposed to be dated in the Laukika era. Other eras were also in use during that period, and the era actually employed in any particular instance must be determined after due consideration of the circumstances of each case. I shall endeavour to prove on a subsequent page that the known dates of the Satraps both of Mathurā and Taxila, who lived long before Kaniṣka, admit of satisfactory interpretation only when read as referring to the Laukika, or popular, era.

III. *The Chinese Historians.*

The early Chinese historians derived their knowledge of the migrations of the Yueh-chi chiefly from the reports of Chang-k'ien (Tchang-k'ien), who visited the Yueh-chi territory in or about B.C. 125. This officer was despatched in or about B.C. 135 by the emperor Wu-ti (Ou-ti, *flor.* B.C. 140–86) on a mission to the Yueh-chi, in order to obtain their assistance against the Hiung-nu, who constantly

harried the Chinese frontiers. The envoy was intercepted by the Hiung-nu, who detained him for ten years, so that he did not arrive at the Yueh-chi chieftain's camp until about B.C. 125. Returning from his mission, Chang-k'ien was unlucky enough to be again intercepted by the Hiung-nu, who detained him yet another year. When at length he returned to China in about B.C. 122, he had been absent from his native land for thirteen years, and was thus well qualified to bring back accurate information about the foreign nations whom he visited.[1]

The story of the travels of Chang-k'ien was recorded by his contemporary Ssŭ-ma-Ch'ien,[2] the Chinese 'Father of History' (b. *c.* B.C. 145), in chapter 123 of his classical work the *Sse-ki*, or "Historical Record."

The historian relates that in the year B.C. 165 the Yueh-chi were dwelling between the Tsenn-hoang country and the K'i-lien mountains, or T'ien-chan Range, in Chinese Turkestan.

At that date the Yueh-chi, having been conquered by the Hiung-nu, who slew their king, emigrated for the most part westward and took possession of the territory of the Se, or Śakas, who fled to the south. The Ou-suenn (Wu-sun) chief Koenn-mouo (K'wen-mo) drove out the Yueh-chi from the Se territory, and compelled them to retreat still further to the west, until they arrived at the country of the Ta-hia, a settled people in possession of fertile lands on the right, or northern, bank of the Oxus. The Ta-hia, who were devoted to commerce and unskilled in war, were quickly and easily reduced to a condition of vassalage. The Yueh-chi, who enjoyed the advantage of the undivided leadership of the son of their king who had been slain by the Hiung-nu, and were brave warriors, skilled in the use of the bow, found no difficulty in subjugating the Ta-hia, who are described as being feeble,

[1] Boyer, "L'Époque de Kaniṣka," p. 533 f., in *J.A.*, Mai-Juin, 1900; Lévi, "Notes sur les Indo-Scythes," reprint, p. 48; Kingsmill, *op. cit.*

[2] Giles: "A History of Chinese Literature," p. 102. The Chinese author's name is spelt Ssŭ-ma-Ch'ien by Professor Giles, Seu-ma Ts'ien by M. Boyer, and in various ways by other authors.

timid folk, without any sovereign ruler. Each of the Ta-hia cities and towns used to appoint for itself a local governor, independent of his fellows, and the nation was thus wanting in cohesion, and unable to offer effectual resistance to the fierce Yueh-chi horde of nomads, who established their capital, or royal encampment, to the north of the Oxus, in territory now belonging to Bukhārā. The Yueh-chi capital was still in the same position when visited by Chang-k'ien in about B.C. 125.

His description fixes beyond doubt the locality of the Yueh-chi horde at that date. "The Ta-Yue-tchi," he writes, "are about two or three thousand *li* to the west of the Ta-ouan (Ta-wan). They dwell to the north of the Oxus; the Ta-hia are to the south of them. The Parthians (Ngan-si or Ngan-sik) are to the west, and the people of Sogdiana (K'ang-kiu) to the north of them. They are a nomad people . . . . The Ta-hia are to the south-west of the Ta-ouan, at a distance of more than two thousand *li*, on the south side of the Oxus."

Chang-k'ien entered the Yueh-chi territory through Sogdiana on the northern frontier, and passed on to the distinct territory occupied by the Ta-hia, south of the Oxus, which was then the boundary between the two peoples. Chang-k'ien also visited the Ta-ouan, and sent messengers to the Parthians (Ngan-si), as well as to the other nations above named. He died about B.C. 114, and the messengers whom he had despatched returned accompanied by natives of the countries to which they had been accredited.

Not a word in the story of Chang-k'ien indicates any reason to suppose that the Yueh-chi occupation of the country, as distinguished from their political supremacy, extended to the south of the Oxus in his time, that is to say, up to B.C. 114. He only knew the Yueh-chi as a people dwelling and having their seat of government to the north of the Oxus, which separated them from their vassals, the Ta-hia, to the south of the river. Whatever lands the Ta-hia had possessed on the north of the Oxus were actually occupied by the victors.

The adventures of Chang-k'ien, as related by the *Sse-ki*, which work was completed before B.C. 91, are retold in the 96th chapter of the History of the First Han Dynasty by Pan-ku (Pan-kou), with three important additions, namely, (1) that "the kingdom of the Ta-Yué-tchi has for its capital the town of Kien-chi (= Lan-chau) . . . . and Ki-pin lies on its southern frontier"; (2) that the Yué-tchi were no longer nomads; although "originally they had been nomads, they used to follow their flocks, and change their ground with them"; and (3) that the Yué-tchi kingdom had become divided into five principalities. "There are," observes Pan-ku, "five principalities. The first is the principality Hieou-mi, having for its capital the town of Ho-me . . . The second . . . is the principality Chouang-mo, with a capital town of the same name . . . The third principality, that of the Kouei-chouang [or Kushāns], has as its capital the town of Hou-tsao . . . The fourth principality, Hi-thun, has for its capital the town of Po-mao (Bâmiyân) . . . The fifth principality, that of Kao-fou [or Kābul, a mistake for Tou-mi], has the town of the same name for its capital . . . These five principalities are dependent on the Ta-Yué-tchi."[1]

[1] The extract from the History of the First Han Dynasty is most fully given by M. Boyer (*op. cit.*, p. 541). That work covers the period down to A.D. 23 or 24, the date of the death of the usurper Wang-Mang, whose reign divides the Han period into two parts. Pan-ku, who died in A.D. 92, had exceptionally good sources of information. According to Professor Giles (*op. cit.*, p. 108), his work was completed by his sister Pan-chao. M. Lévi explains that the variant reading Kien-chi (or Kien-cheu) as the name of the capital city is due to the confusion of two almost identical characters. The correct reading is Lan-cheu, in French spelling. The correct name, Tou-mi, for the fifth principality, is given in the History of the Second Han Dynasty. The mention of Kābul in the History of the First Han Dynasty is an obvious blunder, inasmuch as Kābul was not annexed by the Yueh-chi until the reign of Kadphises I, more than a century after the formation of the five principalities.

M. Sylvain Lévi's identification of Lan-sheu with Puṣkalāvatī (Peukelaïtis), near Peshāwar in India, is absolutely impossible. It rests solely on the fact that long afterwards, in the seventh century, Puṣkalāvatī is described as being, or having been, the Yueh-chi capital, and on the guess that Lan-sheu might possibly be a translation of the Sanskrit Puṣkalāvatī. ("Notes sur les Indo-Scythes," pp. 49, 82.) The Yueh-chi had not annexed either Kābul or Ki-pin, which lay between the Ta-hia territory and India, at the time when they occupied the Ta-hia capital, Lan-sheu. The Chinese texts clearly indicate that the first capital of the settled Yueh-chi was to the north of the Oxus river, and that their

In addition to the three important matters above noted, Pan-ku's work (Lévi, *op. cit.*, p. 53) gives further details about the movements of the Yueh-chi horde, which help to elucidate the order of events.

When Chang-k'ien, after his long captivity, arrived at the Yueh-chi headquarters in B.C. 125, he ascertained that the widow of the Yueh-chi king slain by the Hiung-nu in B.C. 165 had succeeded to his power, probably as regent for her young son. Under her guidance the Yueh-chi, in the course of their westward migration, had attacked the Wu-sun (Ou-suenn), their western neighbours, whose king, Nan-teou-mi, was killed.

After this exploit the Yueh-chi, still marching westward, attacked the Se, or Śakas, who abandoned their territory to the Yueh-chi, and migrated into Ki-pin, on the south.[1] But meantime, Koenn-mouo, orphan son of the slain king of the Wu-sun, had grown to manhood under the protection of the Hiung-nu. The young prince revenged his father's death by a successful attack on the Yueh-chi, whom he drove still further west into the Ta-hia territory. As M. Lévi points out, the growth of this Wu-sun chief from infancy to manhood required time, and the defeat of the Yueh-chi by him must have occurred in or about B.C. 140.

We now come to the important passage in the History of the Second Han Dynasty, which has been known in an

second capital, Lan-sheu, was in the Ta-hia country, that is to say, Bactria, south of and not remote from the river. Balkh is in the required position.

The references to Puṣkalāvatī are collected in the note to Beal's Hiuen Tsiang, i, 109. Mr. Kingsmill writes the name Lan-sheu as Lam-shi-ch'eng, and identifies it with the Δάραψα of Strabo.

[1] M. Sylvain Lévi appears to be certainly right in identifying the Se with the Śakas. The Chinese character used to denote the Se nation is regularly used as the equivalent of the Sanskrit syllables *-saka* in the words *upāsaka* and *mahīśāsaka*. ("Notes sur les Indo-Scythes," p. 50.) My statement that the expulsion of the Śakas from their territory by the Yueh-chi preceded the defeat of the Yueh-chi by the young Wu-sun chief rests on the *Sse-ki* and the report of Chang-k'ien as summarized by M. Lévi (*Notes*, p. 53), which is perfectly explicit, and nearly contemporary with the event. The notice of Ki-pin in the much later History of the First Han Dynasty (*ibid.*, p. 50) states with less accuracy that "formerly when the Hioungnou conquered the Ta-Yue-tchi, the latter emigrated to the west, and subjugated the Ta-hia; whereupon the king of the Se [Çakas] went to the south, and ruled over Ki-pin."

imperfect form for about seventy years, and is the basis of the commonly received opinions on the subject. The early Sinologists copied the passage from the extract given by Ma-twan-lin, the encyclopædist of the thirteenth century. Unfortunately, as M. Lévi explains, Ma-twan-lin placed his extract in juxtaposition with his account of Chang-k'ien's mission in B.C. 125, and so gave rise to the erroneous belief expressed in many books that the unification of the Kuṣana empire took place about a hundred years later than the mission of Chang-k'ien, that is to say, in about B.C. 25 or 20.[1]

The original text has now been carefully examined, and the Sinologists are agreed on the translation. The text plainly shows that the establishment of the Kuṣana empire is to be reckoned as more than a century later than the division of the Yueh-chi kingdom into five principalities, and not merely as more than a century later than the mission of Chang-k'ien, an event which occurred, as we have seen, long before the formation of the five principalities.[2] The foundation of the Kuṣana empire by Kadphises I is thus brought down to a date considerably later than that commonly assumed on the strength of Ma-twan-lin's misleading extract from the History of the Second Han Dynasty.

M. Specht's translation of the celebrated passage in chapter 118 of that History, which is accepted as accurate by Messrs. Sylvain Lévi and Boyer, may be rendered in English as follows:—

"When the Yue-tchi were vanquished by the Hioung-nou, they moved on until they reached (*passèrent chez*) the Ta-hia, [and]

[1] For instance, Professor Percy Gardner in *B.M. Catal. of Coins of Greek and Scythic Kings* (Introd., p. xxxi); and Cunningham, *N.C.* for 1892, p. 41.

[2] "L'Époque de Kaniṣka," p. 544. M. Sylvain Lévi is, I think, in error when he takes the subjugation of the Ta-hia as the point from which the calculation should be made. He refuses to acknowledge that there were two stages in the conquest of the Ta-hia. M. Boyer has rightly perceived that the political subjugation of the Ta-hia, which quickly succeeded the defeat of the Yueh-chi by the young Wu-sun chief, was separated by a long interval of time from the occupation by the Yueh-chi of the Ta-hia lands and capital south of the Oxus.

divided their kingdom into five principalities, which were: Hieou-mi, Choang-mo, Koei-choang, Hi-t'un, [and] Tou-mi.

"About a hundred years later[1] the Koei-choang prince, Kieou-tsieou-k'io, attacked and subjugated the other four principalities, and made himself king of a kingdom which was called Koei-choang.

"This prince invaded the country of the A-si [Parthians]; he took possession of the territory of Kao-fou [Kābul]; he destroyed (*détruisit*) also Po-ta and Ki-pin, and became completely master of those countries.

"Kieou-tsieou-k'io died at the age of eighty. His son Yen-kao-tchin[-tai][2] ascended the throne. He conquered T'ien-tchou (India), and there set up generals, who governed in the name of the Yue-tchi."

The only other texts which require notice are those which establish the curious fact that in the year B.C. 2 a Chinese graduate named King-hien, or King-lou, was instructed in Buddhist lore by a prince of the Yueh-chi. This fact, which is not surprising when we remember the wide range of Aśoka's missionaries, and the proofs recently obtained of the early spread of Buddhism in Khotan, has been used by M. Sylvain Lévi as the basis of inferences which it will not bear. In reality, it is, as M. Boyer has clearly perceived, irrelevant to the discussion of the problem of the date of Kaniṣka.[3]

[1] That is to say, 'more than a hundred years later.' The Chinese characters indicate 'une différence en excès.' (Boyer.)

[2] M. Sylvain Lévi informs me that the syllable *tai*, which he inserted on the authority of M. Specht, does not really form part of the king's name, which is expressed by three Chinese characters only. M. de Lacouperie writes the name Po-ta as Puk-ta, and interprets it as meaning Bactria. The name A-si is, according to him, properly written An-sik, which is said to be the regular equivalent for Arsak. ("Une Monnaie Bactro-Chinoise," from *Comptes Rendus, Acad. B.L. et Inscr.*, 1890, p. 12.) The French spelling of proper names is retained in my English version.

[3] The texts concerning the mission of King-lou have given rise to much discussion, which has been settled by M. Sylvain Lévi, who sums up with the remark that "quelle que soit la recension adoptée comme base, la critique et la tradition n'admettent qu'une seule interprétation: En l'an 2 avant J.-C., le roi des Yue-tchi était bouddhiste, et son zèle travaillait à propager la religion du côté de la Chine" ("Les Missions de Wang Hiuen-Ts'e dans l'Inde," Paris, 1900, p. 112; reprinted from *Journal Asiatique*, Mars–Avril et Mai–Juin, 1900). M. Boyer writes to the same effect: "D'abord quant aux textes, rangés sous deux versions, qui se rapportent à King-lou = King-hien, j'admets qu'il en ressort que, deux ans avant J.-C., la Chine reçut du pays des Ta Yue-tchi des ouvrages

The careful reader of the extracts from the Chinese historians above cited will not fail to observe that the work commonly quoted, the History of the Second Han Dynasty, gives an account of the Yueh-chi migration so condensed as to be misleading. The language of that work, when not checked by other authorities, gives the impression that the main body of the Yueh-chi, immediately after their defeat by the Hiung-nu in B.C. 165, conquered the Ta-hia and divided the territory of the latter into five principalities. But such an impression would be altogether erroneous. The distance from the original pasture-grounds of the Yueh-chi in Chinese Turkestan to the Ta-hia territories north of the Oxus, corresponding to Bukhārā, is very great, and the time occupied by a vast horde of nomads accompanied by their families, flocks, and herds, in marching over so great a distance, must necessarily, even if the march were unopposed, have been very considerable. The particulars preserved by the other historians prove that the actual fact was in accordance with reasonable expectation, and that the march of the horde in search of fresh pastures was contested at each stage. When the Yueh-chi were driven out from their original limits towards the west, they necessarily trespassed on the pastures occupied by their western neighbours, the Wu-sun. The intrusion was resented and resisted, but the Yueh-chi were too strong for their neighbours and defeated them, slaying the Wu-sun chieftain. The victorious horde passed on, and next came into conflict with the Se, or Śakas, who also were vanquished, and compelled to retreat southward before the advancing wave of invasion. But meantime the son of the slain Wu-sun chief had grown to manhood under the protection of the Hiung-nu, and revenged his father's death by inflicting a decisive defeat on the Yueh-chi, who were driven from their recently conquered Śaka territory, and

buddhiques" ("L'Époque de Kaniṣka," in *J.A.*, Mai–Juin, 1900, p. 527). For some account of Buddhism in Khotan see Dr. Stein's "Preliminary Report on a Journey of Archæological and Topographical Exploration in Chinese Turkestan," London, 1901; and several passages in Hiuen Tsiang's travels.

were forced still farther to the west, where they fell upon the peaceful Ta-hia dwelling north of the Oxus, in the country now known as Bukhārā.[1]

All these events intermediate between the Hiung-nu victory of B.C. 165 and the political subjugation of the Ta-hia are omitted from the condensed summary in the History of the Second Han Dynasty.

But it is easy, by paying due regard to obvious probabilities, to arrange the history in a practically accurate chronological order. All the Sinologists are agreed that the Hiung-nu terminated a struggle, which had begun in B.C. 201, by gaining at some time in B.C. 165 a decisive victory over the Yueh-chi, who were constrained to surrender their pastures to the victors, and to march westwards in search of food for the flocks and herds, which alone gave them necessary sustenance and constituted their only wealth. The conflict of the Yueh-chi with their western neighbours, the Wu-sun, may be dated with sufficient certainty in B.C. 163. The Yueh-chi, although so far successful as to kill the Wu-sun chieftain, were not able to expropriate the defeated horde, and had perforce to continue their westward march.

They next came into conflict with the Se, or Śakas, who were completely vanquished, and so utterly broken that they abandoned their lands to the invaders, and retired to a distant region, Ki-pin, in the south. The defeat and flight of the Śakas may be dated with a very close approach to absolute accuracy in the year B.C. 160. But the Yueh-chi were not allowed to remain in peaceful possession of the pastures wrested from the Śakas. They were themselves assailed by the young Wu-sun chief, who was an infant when his father was slain in the conflict of B.C. 163. This young prince had meantime grown to manhood under the protection of the Hiung-nu, the ancient enemies of the

[1] M. Boyer (*op. cit.*, p. 536), quoting the *Sse-ki*, observes that the Yueh-chi, "ayant trouvé, venant de l'est, sur la rive droite de l'Oxus, une terre fertile (cf. fol. 2 v°), occupée par les Ta-hia, ils livrèrent bataille, et, la victoire gagnée, 'ensuite eurent leur capitale au nord du Koei-choei [Oxus], et y établirent la cour royale.'"

Yueh-chi, and succeeded, with Hiung-nu help, in driving the Yueh-chi from the recently conquered Śaka lands. The Yueh-chi, after this second defeat, were forced to resume their weary westward march. We cannot err appreciably if we date these events in B.C. 140.[1]

The Yueh-chi, still pressing westward, next fell upon the section of the Ta-hia people dwelling on the right, or northern, bank of the Oxus, and after a faint show of resistance, easily mastered these feeble foes. The reduction of the whole Ta-hia nation to vassalage, and the Yueh-chi occupation of the Ta-hia lands north of the Oxus, may be assigned to the year 138 B.C. It is certain that as late as B.C. 115 the Yueh-chi horde still remained north of the great river. The horde had now for a time come to the end of its pilgrimage, and was no longer pressed by hostile tribes in the rear. The fierce nomads made themselves comfortable among the rich and unresisting Ta-hia, and gradually settled down in fixed habitations. When we next obtain a glimpse of them in Pan-ku's History of the First Han Dynasty, the nomad habits had been lost, and the descendants of the invaders, having multiplied during the long years of peace, had overflowed the banks of the Oxus, occupied the Ta-hia capital south of the river, and expropriated the timid natives, who were incapable of offering effectual resistance. The great change implied in the brief statement that the Yueh-chi nation had abandoned its ancestral habits and adopted the mode of life practised by its vassals was not accomplished in a single generation. It is not too much to allow the lapse of three generations for a transformation so momentous, and for the increase of population which made expansion to the south of the river inevitable.[2]

The movement was, of course, spread over a considerable time, but we are not in a position to describe details, and shall probably be near the truth if we assume the extension

[1] This date is adopted by M. Lévi (*op. cit.*, p. 53). M. de Lacouperie (*Academy*, December 31st, 1887) states the date as "about 143 B.C."

[2] Mr. Kingsmill ("The Migrations," p. 17) clearly perceived that the conquest of Bactria by the invading tribes was "probably gradual rather than sudden."

of the Yueh-chi occupation over Bactria south of the Oxus, and as far south as Bāmiyān in the Hindū Kūsh mountains, to have been completed by B.C. 70. The division of this territory into five principalities may be assigned to about the same date.

During this period, from 138 to 70 B.C., the invading hordes from Central Asia came into contact with the Græco-Bactrian kings. Numismatic evidence shows that Heliokles, who was probably a son of Eukratides, was the last Greek ruler north of the Paropanisus. The suppression of his government quickly followed the subjugation of the Ta-hia by the Yueh-chi, and may be approximately dated in B.C. 130. Strato I, the undoubted contemporary of Heliokles, ruled about the same time in the Kābul Valley and Pañjāb. He was succeeded by his son Strato II, who was superseded in the Pañjāb by a line of foreign princes, probably Śakas, who took the Persian title of Satrap, and seem to have had their seat of government at Taxila. About the same time a closely connected dynasty of Satraps, also of Śaka race, established themselves at Mathurā, and dispossessed the native Hindu rulers of that part of the country, who had been content with the ordinary title of Rāja.

During the same disturbed period a dynasty of Parthian kings succeeded in establishing itself on the frontiers of India, and maintained its position, in part at least, up to the time when Kadphises II annexed Northern India to the Yueh-chi empire, about 90 A.D. The crushing defeat of Crassus at Carrhæ in B.C. 53 had, of course, greatly enhanced the power and prestige of the Parthians.[1]

Ki-pin, or Northern Afghānistān, the Kapiśa of later writers, continued to be independent of the Yueh-chi.[2] The

[1] The chronology of the Northern Satraps and the Indo-Parthian kings will be further discussed in a later section of this paper.

[2] The Chinese writers, as the extracts cited prove, distinguish Ki-pin from Kao-fu, or Kābul. I agree with M. Sylvain Lévi, in opposition to M. Specht, that the Ki-pin of the Chinese must be identified with the Kapiśa of Hiuen Tsiang. (*J.A.*, ser. IX, t. vii, p. 161; and *ibid.*, t. x, "Note Additionelle," pp. 526–531.) Hiuen Tsiang (*Beal*, i, 57; *Julien*, i, 42) states that the kings of Gandhāra spent the autumn and spring in Gandhāra and the summer in Kapiśa. The later pilgrim Ou-k'ong states that the town of Gandhāra is the eastern

Chinese emperor Yuen-ti (B.C. 48–33) refused to take any notice of an insult offered to his envoy by In-mo-fu, the king of Ki-pin, and the emperor Ching-ti (B.C. 32–7) declined to acknowledge an embassy sent from Ki-pin. In the year 8 A.D. all intercourse between China and the Western countries (Si-yu) temporarily ceased. I have already mentioned the curious fact that in B.C. 2 the unnamed king of the Yueh-chi communicated certain Buddhist books to the Chinese graduate King-lien, or King-lu.

Except for the few facts alluded to in the above observations, the history of the Yueh-chi from the date of their division into five principalities, and of the extension of their dominion to the Hindū Kūsh in about B.C. 70 or 65 up to the Christian era, is unknown. For 110 or 115 years after the occurrence of those two events, that is to say, up to about 45 A.D., the details of the history are equally unknown, but, after the lapse of approximately that period, the ruler of the Kuṣana, or Kushān, principality, who is known to European scholars as Kadphises I, succeeded in crushing his colleagues who ruled the four other principalities, and in consolidating the whole territory governed by the Yueh-chi into a single empire under his own sway.[1] This event must have occurred in or about A.D. 45. It is an undoubted fact that the coins of this king copy those either of the closing

capital of Ki-pin, where the king resides in winter; he spends the summer in Ki-pin. The Ki-pin of Ou-k'ong is therefore the Kapiśa of Hiuen Tsiang. Similarly, Ou-k'ong places the convent of the Śrāmanera in Gandhāra, while Hiuen Tsiang places it in Kapiśa (*Beal*, i, 63). The identification of Ki-pin with Kophēnē, or the Kābul region (*Beal*, i, p. c), must be given up. The kingdom was sometimes spoken of by the name of the province of Gandhāra, where the winter capital was situated, and sometimes by the name of the province of Kapiśa, Northern Afghānistān, where the summer capital was located in the hills.

[1] Scholars are now generally agreed that Kujula (KOZOUΛO) Kadphises is identical with Kozola (KOZOΛA) Kadaphes. Kujula Kara Kadphises (*Num. Chron.* for 1892, p. 66), although distinguished by Cunningham, is evidently the same person. Inasmuch as that person is undoubtedly the first Kuṣana king who struck coins to the south of the Hindū Kūsh, and it is possible to identify his Indian names with the Chinese, he must be the same as K'iu-tsiu-koh. The subject is well discussed by M. Boyer in "L'Époque de Kaniṣka," pp. 550–564 (*J.A.*, Mai–Juin, 1900).

years of Augustus or those of his successor Tiberius. Inasmuch as Augustus died in A.D. 14, the date which I have assumed for the accession of Kadphises I, as deduced from analysis of the Chinese historians, is quite in accordance with the numismatic fact.[1]

In the course of a long and glorious reign Kadphises I thoroughly subdued Kābul and Ki-pin, as well as Bactria, and supplanted Hermæus, the Greek king of Kābul and the north-western part of the Pañjāb. With Hermæus disappeared the government of the successors of Alexander in India. Kadphises I lived till he attained the ripe age of eighty, and in or about A.D. 85 transmitted his royal power to his son, whom we know as Kadphises II.[2] This great monarch was compelled early in his reign (A.D. 90), as the penalty of an unsuccessful war, to pay tribute to China,[3] but he found ample compensation for this humiliation in the conquest of Northern India, which he gradually achieved. The government of the Indian provinces was entrusted by him to military viceroys. The abundant coins which bear the legend *Sotēr Megas* in Greek, without any personal name,

[1] The most convenient summary account of the Kuṣana coinage is that given by Mr. Rapson in "Indian Coins" (1897), pp. 16 *seqq.*, which furnishes abundant references to all publications on the subject. A table of weights and assays of the gold coins will be found in Cunningham's "Coins of Mediæval India," p. 16. It is just possible, as Mr. Rapson informs me, that the head on the coins of Kadphises I may be copied from that of Tiberius, which is very similar to the Augustan portrait. But the Kuṣana head most closely resembles the portraits on the coins of Gaius (Caius) and Lucius, the grandsons of Augustus, who died respectively in B.C. 4 and A.D. 2. See Von Sallet, *Zeit. für Num.*, 1879, pp. 218, 378; *Nachfolger Alexander's*, p. 180; Von Gutschmid, *Gesch. Iran*, p. 136.

[2] The Chinese statement that Yen-kao-chin was the son of K'iu-tsiu Kioh, or Kadphises I, precludes the hypothetical insertion of any king between Kadphises I and Kadphises II. Nobody, I think, disputes the identity of the Yen-kao-chin of the Chinese with Hima, or Wema (OOHMO), Kadphises, who is, for convenience, designated as Kadphises II.

[3] The Chinese general Pan-tch'ao (Pan-chao) was engaged from A.D. 73 to 102 in reducing the western countries to obedience. In A.D. 73 he obtained the submission of the King of Khotan. In A.D. 90 the Yueh-chi king demanded a Chinese princess in marriage. The demand being resented, the Yueh-chi king raised a force of 70,000 horse under the command of a general named Si, who was defeated by the Chinese after his army had suffered severely in the passage of the Tsung-ling mountains. From that date the king of the Yueh-chi regularly sent tribute to China. (Lévi, *op. cit.*, p. 65; quoting De Mailla, "Histoire Générale de la Chine," transl. from the *Toung-tien-tan mou*, pp. 365 *seqq.*)

and which are undoubtedly contemporary with Kadphises II,[1] appear to be the issues of these military viceroys, struck on behalf of their sovereign. The Indian dominions of Kadphises II certainly extended to the Ganges, and probably at least as far south as Benares. His empire extended westward to the frontiers of Parthia, and included the whole of the countries now known as Afghānistān, Afghān Turkestan, Bukhārā, and parts of Russian Turkestan.

During the victorious reign of Kadphises II, in about A.D. 107, an Indian embassy was received by the Emperor Trajan,[2] which was probably despatched by the Yueh-chi monarch. The Eastern expeditions of Hadrian and the long residence of that emperor at Athens (A.D. 123–126) helped to diffuse the Roman influence which was at this time exercised upon India, and of which the traces are plainly visible in the coins and sculpture of the period.

The fact that Kadphises II enjoyed a long reign is abundantly established by our knowledge of the extent of his conquests, and by the multitude of his extant coins in both gold and copper. I agree with Cunningham in assigning to this reign a space of forty years in round numbers.

In or about A.D. 125 Kadphises II was succeeded by the still more famous Kaniṣka. This monarch carried his arms across the formidable passes of the Karakoram (Tsung-ling mountains), and may perhaps have penetrated as far eastward as Kashgar, or even Khotan. He also engaged in war with the King of Pāṭaliputra,[3] and made himself master of

[1] The unique coin described by Cunningham (*Num. Chron.* for 1892, p. 71, pl. xv, fig. 14), which exhibits a bust with two faces, the left face being bearded, with the Kadphises symbol in front, while the right face is smooth, with the symbol of the Nameless King in front, is conclusive evidence that the two princes were contemporary. Cunningham specifies four details in which the coins of both agree. "The coins of both kings are common in the Kābul Valley, throughout the Panjab, and in N.W. India, as far east as Benares and Ghazipur."

[2] Dion Cassius, ix, 58; in McCrindle, "Ancient India as described in Classical Literature," p. 213. The exact date of the Indian embassy is not recorded.

[3] The evidence for the war with the King of Pāṭaliputra is the tradition in the *Śrī Dharma-piṭaka-saṁpradaya-nidāna.* (Lévi, *Notes*, reprint, p. 37.)

Kaśmīr, with which country his name is specially associated. Some years after his accession, say in or about A.D. 135, Kaniṣka, like his prototype Aśoka, became a convert to Buddhism. According to tradition, which is to some extent confirmed by other evidence, he rivalled the glories of Aśoka both as a builder of holy monuments and as the convener of a church council, which probably met in Kaśmīr.

The reign of Kaniṣka, too, was long. According to my reading of the dates, he was succeeded in A.D. 153 by Huviṣka, or Huṣka, who was probably his son.[1] Practically nothing is known of what happened in Northern India during Huviṣka's tenure of power. Marcus Aurelius Antoninus was emperor of Rome during the greater part of his reign, and the Roman influence on India was then at its height.

In or about A.D. 185 Huviṣka was succeeded by Vāsudeva, or Vāsuṣka, who continued to rule the empire up to about A.D. 225. His last known date, according to my reckoning, is A.D. 222, the year in which Alexander Severus became emperor of Rome. After the death of Vāsudeva, the Kuṣana power in India seems to have been much restricted, although it still held its ground in the Pañjāb and beyond the frontiers of India. Within the limits of India the native powers reasserted themselves, and less than a century after the death of Vāsudeva, Candra Gupta I (A.D. 320) laid the foundations of the third Indian imperial dynasty, that of the Guptas; under whose patronage a great Brahmanical revival took place, involving the gradual decline of Buddhism, and the substitution of Sanskrit for Prakrit as the language both of literature and of official and votive records. The outline of the history of the Gupta Brahmanical revival has been well traced by Dr. R. G. Bhāndārkar

[1] The name of the second king is ordinarily written in the inscriptions as Huviṣka, but the forms Huvaṣka, Huvikṣa, and Hukṣa also occur in the Mathurā records. The Rājatarañginī uses the form Huṣka. The third king's name, which is commonly written Vāsudeva, is written Vāsuṣka in the Sāñci inscription of the year 78, and in one Mathurā inscription of the year 76. He is called Juṣka in the Rājatarañginī. The Greek legends on the coins give other variants of the Kuṣana names, which evidently presented difficulties of transliteration to Indian and Greek writers.

in his paper entitled "A Peep into the Early History of India." The same author's ingenious theory of the Kuṣana chronology is radically vitiated by its neglect of the testimony of the Chinese historians. That testimony is absolutely inconsistent with the supposition that Kaniṣka began to reign in A.D. 278, as supposed by Dr. Bhāndārkar. The outline of Kuṣana history which I have given, while consistent with my theory as to the use of the Laukika era, will also, I venture to hope, be accepted as consistent with a reasonable interpretation of the Chinese evidence.

Objection may be taken that I have assumed an abnormal and incredible duration for the reigns of the great Kuṣana sovereigns. The reigns of five successive kings, Kadphises I, Kadphises II, Kaniṣka, Huviṣka, and Vāsuṣka, or Vāsudeva, extended, according to me, over a period of about 180 years, from about A.D. 45 to A.D. 225. But the assumption of this extended duration is amply justified. The series of dated inscriptions giving the kings' names extends from the year 5 to the year 98, and is conclusive proof that the three reigns of Kaniṣka, Huviṣka, and Vāsuṣka covered a period of a century in round numbers. Kadphises I is known to have lived to the age of eighty, and both he and his successor made extensive conquests which must have occupied them for many years. The abundance of the coins of both kings is also good evidence that their reigns were long, and my estimate of the duration of the reign of Kadphises II agrees with that made by Cunningham on the strength chiefly of numismatic facts.

The chronology of the Mughal dynasty of India affords a practically exact parallel. Humāyūn ascended the throne for the first time in A.D. 1530, and the death of Aurangzīb occurred in A.D. 1707. The interval of 177 years occupied by five reigns and as many generations of kings is practically equal to the period of 180 years which I assume for the five successive reigns of the Kuṣana kings. Five reigns and generations of the Gupta dynasty from A.D. 320 to about A.D. 480 occupy 160 years, and six reigns and generations of the Hanoverian dynasty of England, from 1714 to 1901, occupy 187 years.

There is, therefore, no improbability in assuming that five successive Kuṣana monarchs reigned for 180 years.

IV. *The Numismatic and Epigraphic Evidence.*

The numismatic facts tally exactly with the assumption that the Kuṣana dates refer to the Laukika era.

If Kadphises I reigned from about A.D. 45 to 85, there is no difficulty in understanding the fact that one type of his coins, issued subsequently to the final subjugation of the Greek king Hermæus, and dating from about A.D. 50–60, exhibits a king's head manifestly copied either from that on the coins of the closing years of Augustus, who died in A.D. 14, or from that on the coins of Tiberius, the successor of Augustus.

If Kadphises II reigned from about A.D. 85 to 125, there is no difficulty in understanding the fact that his gold coins agree exactly in weight with the *aurei* of the early Roman empire, which, according to the testimony of Pliny (A.D. 77) and the evidence of numerous finds, poured into India in vast quantity for many years.[1]

If Huviṣka came to the throne in A.D. 153, it is not surprising that in the Ahinposh *Stūpa* near Jalālābād a coin of his was found along with a coin of the empress Sabina, who shared the imperial throne from A.D. 128 to 137.

I need not refer particularly to cases in which Roman coins much anterior in date have been found associated with Kuṣana coins. Any person making a foundation deposit was always at liberty to put in any old and curious coins which he might possess and fancy to use. The latest coins in a deposit are alone of value as a measure of the age of the deposit. The collection in the Ahinposh *Stūpa* comprised pieces struck by the Indian sovereigns Kadphises (? II),

[1] Pliny, *Hist. Nat.*, xii, c. 18 (41), transl. McCrindle, in "Ancient India as described in Classical Literature," p. 125; Cunningham, "Coins of Ancient India," p. 50; Thurston, Catalogue No. 2 of Coins in Government Central Museum, Madras; Rapson, "Indian Coins," secs. 14, 69, 123.

Kaniṣka, and Huviṣka, by the Roman emperors Domitian (A.D. 81–96) and Trajan (A.D. 98–117), and by the empress Sabina (A.D. 128–137). The presumption, of course, is that the monument was erected in the reign of Huviṣka, the latest Indian sovereign whose coinage is included in the deposit. Whatever ancient coins might be put in, the depositor would certainly include a specimen of the coinage of the local reigning king. At Ahinposh the depositor added to the single coin of his sovereign Huviṣka specimens of the coinage of Huviṣka's predecessors and of their Roman contemporaries. The contents of the deposit are exactly what might be expected on the assumption that the accession of Huviṣka occurred in A.D. 153, sixteen years after the death of the empress Sabina.

The close relationship in weight, types, and palæography between the coins of the imperial Gupta dynasty (A.D. 320–480) and those of the Kuṣana kings Kaniṣka, Huviṣka, and Vāsudeva, is obvious, and has always been recognized. But the connection between the Kuṣana and Gupta coinages, although close, is perfectly consistent with the assumption that Candra Gupta I ascended the throne nearly a century after the death of Vāsudeva.

The same remark applies to the palæography of the stone inscriptions. It is not always easy by mere inspection to distinguish an inscription of the Kuṣana from one of the Gupta period. Many alphabetical forms specially characteristic of Gupta inscriptions are found sporadically in Kuṣana records (see No. 46 of List of Inscriptions), while, on the other hand, Gupta documents often exhibit archaic forms specially characteristic of the Kuṣana age. But, notwithstanding this overlapping of forms, the general complexion of the Kuṣana inscriptions is distinctly more ancient than that of the Gupta documents. The relation between the two is altogether consistent with the belief that about a century intervenes between the latest known record of Vāsudeva's reign and the earliest known Gupta documents, the Sanskrit legends on the coins of Candra Gupta I. The current belief, which places the accession

of Kaniṣka in A.D. 78, adds half a century to the gap between the Kuṣanas and the Guptas, and is less easily reconcilable with the palæographic facts than the theory which I advocate. The dearth of Indian inscriptions in the second and third centuries A.D. has been often the subject of remark. By the proposed amendment of the chronology the Kuṣana inscriptions come down to A.D. 223 or 224, and the period barren of inscriptions is reduced to narrow limits. The gap is, indeed, partly filled by the Loriyān Tangai inscription, dated 318, which date I interpret as approximately equivalent to A.D. 261.

One Jain inscription from the Kaṅkālī mound at Mathurā, which in language and script agrees exactly with other votive inscriptions dated in the years 4 to 98 from the same site, is peculiar in being dated in the last decade of the third century of an unspecified era. The characters for two hundred and ninety are certain, but the unit figure, which is probably 9, is doubtful. The peculiar mode in which this inscription is dated is one of the chief arguments used by Mr. Bhāndārkar to support his theory that the series of dates ranging from 5 to 98 should be read as 205 to 298 Śaka. The inscription stands absolutely alone, and undoubtedly calls for explanation.

The weight of evidence is in favour of the belief that the era known by the name of Śaka or Sālivāhana originated in Western India, and did not come into use, even partial use, in Northern India until a late period. It is, I think, certain that the dates of the Western Satraps, the Śaka rulers of Saurāṣṭra, which begin with the inscription of Rudrādaman dated in the year 72, are to be interpreted as expressed in the era afterwards known by the name of Śaka. The still earlier records of Nahapāna the Kṣaharāta, with dates ranging from 41 to 46, are generally supposed to refer to the same era, but I have not closely examined the validity of that supposition, although I see no reason to doubt it.

In Northern India the earliest inscription which is certainly dated avowedly in the Śaka era is that dated Śaka 784 at Deogaṛh in the Lalitpur subdivision of the

Jhānsī District. According to Professor Kielhorn and Cunningham, the second *praśasti* at the Baijnāth temple at Kīragrāma in the Kāngra valley is dated in Śaka 726, but Dr. Fleet informs me that the date should probably be read as 926. The inscription from Govindpur in the Gayā District of Bihār dated Śaka 1059 is the next in date of the few northern records dated according to the Śaka era.[1] No inscription in Northern India earlier than these three can be pointed out, of which the date, expressed in an unspecified era, must be necessarily understood as referring to the Śaka era. The theories of Professor Oldenberg and Mr. Bhāndārkar, which agree in the doctrine that the Kuṣana inscriptions are dated in the Śaka era, require us, contrary to all probability, to suppose that the Śaka reckoning was adopted for a century in Northern India, and then dropped. I know, of course, that attempts have been made to bring Kharoṣthī inscriptions with dates exceeding 100 into line with the series dated from 4 to 98, but, as will presently be shown, those attempts fail. The Laukika era, on the contrary, although its use is now much more restricted than it was in ancient times, has always continued in use in parts of Northern India. The preference which it gained in the time of Kaniṣka, Huviṣka, and Vāsuṣka may be due to the close connection of those kings with Kaśmīr, the special home of the Laukika reckoning.

It is certain that, even in late mediæval times, the Śaka reckoning was very rarely used in Northern India, and there is no evidence of its use before the eighth century A.D. The Gupta, Harṣa, Vikrama, and other eras were those in common use.

[1] Kielhorn, "A List of the Inscriptions of Northern India from about A.D. 400," being an appendix to *Epigraphia Indica*, vol. v. The inscriptions referred to are Nos. 351, 352, and 362. References to the original authorities will be found in Professor Kielhorn's List. On the western origin of the Śaka era see M. Boyer's paper on Nahapāna and the Śaka era in *Journal Asiatique*, Juil.–Dec., 1897, pp. 120–151. M. Boyer points out that in both the Baijnāth and the Deogarh inscriptions the Śaka date is a secondary one. The primary expression of the date at Deogarh is in the Vikrama era. At Baijnāth the first *praśasti* is primarily dated in the Laukika era (*Ep. Ind.*, i, 103).

When discussing the details of the Laukika era I have shown that the supposed notation by 'the omission of hundreds' does not exist. The ordinary notation of dates in that era omits both the hundreds and thousands, which notation is peculiar to that era,[1] and is apparently the result of the trouble involved in reckoning by thousands. It seems, however, to be quite possible that, exceptionally, the thousands of a Laukika date may be omitted and the hundreds expressed. This is, I am inclined to believe, the explanation of the date 299 in the Kuṣana inscription from Mathurā. On this assumption it would belong to the same series as the dates from 4 to 98, and would fall in the reign of Vāsudeva or Vāsuṣka. The date of the inscription in question is expressed in the words *Mahārājasya rājātirājasya svarvaccharasvate* [leg. *saṁvaccharasate*] *d*[*ū*] . . . . 29[? 9] *hemantamāse* 2 *divase* 1: "In the second century [exceeded by ninety-nine?], 29[9] of the Mahārāja and Rājātirāja, in the second month of winter, on the first day." An alternative and perhaps safer explanation is to regard the date 299 as expressed in terms of an era identical, or nearly identical, with the era of Vikrama, B.C. 57. On this supposition the date would be equivalent to A.D. 242, which is quite possible.[2] In either case the inscription does not conflict with the theory that the Kuṣana dates from 4 to 98 are expressed in the Laukika era.

Two of the Mathurā inscriptions bearing dates higher than 100 (*Reports*, iii, pl. xvi, figs. 22, 23) were treated by Cunningham as Kusaṇa documents, and may seem to the reader of the Reports to be obstacles in the way of my theory. No. 22 is dated in the year 135, and No. 23 in the year 281, according to Cunningham's reading, or either 230 or

[1] The only certainly dated piece in the Bactrian series of coins is the unique coin of Plato (*B.M. Catal.*, p. 20), dated in the year 147, referable to the Seleucidan era. The marks on other coins which Cunningham read as dates with the hundreds omitted are not accepted as such by most numismatists.

[2] This inscription is briefly alluded to by its discoverer, Dr. Führer, in his Progress Report for the year ending 30th June, 1896. It is discussed, transcribed in English characters, and translated by Bühler in a letter dated April 10th, 1896, of which I possess a printed proof. I am not certain where it appeared. I have not seen a facsimile of this puzzling record.

231, according to Dr. Fleet's reading. The mark which Cunningham read as 1 in the latter date may be interpreted either as 1 or a sign of punctuation. The second numerical symbol in the same date is of unusual form, but is more probably 30 than 80. The date may, I think, be best taken as 231. Both these inscriptions have been treated by Dr. Fleet as belonging to the Gupta period, and as dated in the Gupta era. They are edited by him as Nos. 63 and 70 respectively in his "Gupta Inscriptions." Both are Buddhist donative records, the former coming from the old jail mound and the latter from the Katrā mound. The language is Sanskrit, and the donative formula in both, *deyadharmoyaṁ . . . . yadatra puṇyaṁ tadbhavatu mātapitroḥ sarvvasattvānāñcha anuttarajñānāptaye*, is characteristic of the fifth and sixth centuries. The script and numerical symbols also are those of the Gupta, not of the Kuṣana period. There can, therefore, be no doubt that both these records are dated in the Gupta era, and that they are in no way opposed to my theory. The year 135 G.E. is equivalent to A.D. 454–455, and the year 231 G.E. to A.D. 550–551.[1]

The conjecture was hazarded by Bühler, and adopted by the Messrs. Bhāndārkar, that certain Kharoṣṭhī inscriptions at various localities which bear dates in figures above a hundred should be interpreted as forming a continuous series with the group of Kuṣana records ranging from 4 to 98. This conjecture is, I believe, baseless. I have shown that the Mathurā dates 135 and 281 (or 231), which Cunningham treated as referring to the same era as the 4–98 dates, really refer to the Gupta era. Each inscription recorded by a private donor was dated by him in the era current at the time and most familiar to him, and usually without specification of the name of the era. No *primâ facie* presumption arises that an inscription dated in an unnamed era is to be referred to the Gupta, Vikrama, Laukika, or

[1] The texts and translations in the *Reports* are full of errors. For the script, numerical symbols, language, and formula, *cf.* "Gupta Inscriptions," Nos. 72, 76; the Kudā inscriptions in *Arch. Surv. W.I.*, iv, pp. 12–14, 85, 86; and inscribed statuettes from Bundelkhaṇḍ in *J.A.S.B.*, lxiv, pt. i, p. 160.

other particular era. The determination of the era used in each case must be determined by the special circumstances of each. Thus, in the cases just discussed, a close examination of the language, alphabetical characters, numerical symbols, and formula clearly proves that the Mathurā inscriptions dated 135 and 231 are to be referred to the Gupta era, and not to the era used by donors contemporary with the great Kuṣana kings. The Kharoṣṭhī dates must be examined and treated on the same principles.

One of the most famous of these rare Kharoṣṭhī inscriptions is that from Takht-i-Bahi (or -Bahāī), north-east of Peshāwar, which was published by Cunningham in an incorrect form, and has been revised by M. Senart.[1] The record, although too imperfect to admit of continuous translation, is certainly a Buddhist votive inscription recorded in the 26th year of the Maharaya Guduphara on the 5th day of the month Vesākha of the year 103 of an unspecified era. It is impossible to doubt that the Maharaya Guduphara mentioned in this record is the well-known king Gondophares, whose coins are abundant in the Pañjāb and Eastern Afghānistān. On the obverses of the coins his name in Greek characters assumes the forms Gondophares, Goudaphares, and Undopherres, which last is perhaps to be read as beginning with an aspirate. The reverse legends in the Kharoṣṭhī script give the name as Gudaphara, Gadaphara, or Gudaphana. This monarch, whose name occurs in the Golden Legend tale of Saint Thomas, which is said to be traceable back to the third century A.D., was clearly of Parthian origin, and his coins are closely related to those of other Indo-Parthian kings. All the indications of his date taken together show that he must have reigned in the first half of the first century A.D. He uses the title *αὐτοκρατώρ*, which was introduced by Augustus, who died in A.D. 14, and was adopted by the Parthian king Phraates IV, A.D. 8–11. The square *omega* and square *omikron*, which were not definitely adopted by the Arsacidæ

[1] *Reports*, v, 59, pl. xvi, fig. 3; "Notes d'Épigraphie Indienne," No. iii, p. 11.

before A.D. 8, frequently occur in his coin legends. The Golden Legend makes him the contemporary of St. Thomas, and the relation of his coins to those of Azes, Soter Megas, and other rulers on the Indian frontier agrees with the other data which indicate his reign as lying in the first half of the first century A.D.[1] If, on this evidence, the conclusion be accepted that the accession of Gondophares must be placed somewhere about A.D. 25, it follows that the unnamed era of an inscription dated in the year 103 of that era and in his 26th regnal year must run from about the middle of the first century B.C. The only known era starting from that point is the Mālava or Vikrama era of B.C. 57, and, in order to avoid the assumption of the existence of another unknown era with approximately the same starting-point, we are justified in provisionally treating the Takht-i-Bahāī inscription as being dated in that era. This theory is, as Mr. Rapson has observed, "supported by every recent discovery" (*J.R.A.S.* for 1900, p. 389).

On this assumption the date of the Takht-i-Bahāī inscription is 103 − 57 = A.D. 46, the 26th year of the reign of King Gondophares. His accession therefore occurred twenty-five years earlier, or in A.D. 21. This date, which is certainly close to the truth, is a most valuable resting-place in the troubled sea of Indian chronology.

An inscription recently found at the Kaladara Nadī, near the Malakand Pass, on the road to Chitrāl, not very far from Takht-i-Bahāī, seems to mention a Kuṣana (Guṣana) king whose name is lost. The date of this record is certainly the 20th day of the month Śravana in the year 113.

The Panjtār inscription, from the banks of the Indus in the Yusufzai country, dated in the year 122, undoubtedly included the words *Maharayasa Guṣanasa*. Both these records should be referred to the era used in the Takht-i-Bahāī inscription.

[1] For the date and coins of Gondophares, see Rapson, "Indian Coins," sec. 62; Gardner, *B.M. Catal.*, p. xlvi; Von Sallet, *Nachfolger*, pp. 157, 221–230; Sylvain Lévi, "Notes sur les Indo-Scythes," reprint, pp. 67–82. M. Lévi is ingenious, but unconvincing. Von Sallet, relying on the fact that the king's tiara on the coins of Sanabares appears to be copied from the Parthian tiara of A.D. 77 or 78, places Gondophares in A.D. 60–80, a little later than I do.

The form *Maharaya* used instead of *Mahārāja* in both the Takht-i-Bahāī and Panjtār inscriptions deserves special notice, because it occurs on the bull and camel type coins, some of which bear the legend *Maharayasa rayarayasa devaputrasa Kuyula Kara Kaphsasa*, or *Kuyula Kara Kapasa maharayasa rayatirayasa*.[1] Those coins are, as has been shown above, referable to the founder of the Kuṣana dynasty, who is most conveniently called Kadphises I. He may reasonably be assumed to be the *maharaya* of the Panjtār inscription. My dates for the reign of that monarch, A.D. 45 to 85, overlap the dates assigned to Gondophares, who may be assumed to have died in A.D. 50, and is described by the same title *maharaya*. His successors, Abdagases, Sanabares, etc., can easily be fitted into the interval between that date and the conquest of Northern India by Kadphises II subsequent to A.D. 85, and in or about A.D. 95. This arrangement agrees accurately with Von Sallet's observation that the coins of Sanabares imitate the Parthian coinage of A.D. 77 and 78.

The Loriyān Tangai inscription from the Swāt Valley, dated 318, and the Hashtnagar inscription from the Yusufzai country, dated 384, should, I think, be referred to the same era.

The result of this detailed examination is that the Kharoṣṭhī inscriptions dated in figures higher than 100, whether or not they belong to the Kuṣana period, offer no obstacle to the acceptance of my theory that the Kuṣana dates in the series from 4 to 98 are expressed in the Laukika, or popular reckoning.[2]

One other class of numismatic and epigraphic evidence remains to be considered, namely, that which refers to the

[1] Cunningham, *Num. Chron.* for 1892, p. 66, Nos. 1, 2, pl. xiv, figs. 9, 10; Gardner, *B.M. Catal.*, pl. xxiii, fig. 7.

[2] The Panjtār inscription was discovered in 1848 by Cunningham, but both it and the Ohind inscription (No. 48 of my list) were soon afterwards lost. They are known only from the imperfect editions in *Reports*, v, 58, 61. The Takht-i-Bahāī inscription is in the museum at Lahore. The Loriyān Tangai, Hashtnagar, and Kaladara inscriptions are noticed together by Burgess in *J.R.A.* for January, 1900, p. 89. The Hashtnagar date has been variously read, but is certainly 384. It is really perfectly plain. The date is wrongly given at p. 32 of the *J.R.A.* for July, 1898.

princes known to modern scholars as the Northern Satraps. One line of these princes ruled at Mathurā, and another, connected, but distinct, at Taxila in the Pañjāb. Both these dynasties were almost certainly Śakas by race, and were carried into India on the wave of invasion generated by the rout of the Śakas by the Yueh-chi in or about B.C. 160. The Śakas, abandoning their lands beyond the Oxus to the victors, retreated in a southerly direction, and passing through the Ta-hia country, settled themselves in the mountains of Ki-pin or Kapiśa, that is to say, Northern Afghānistān. Thence the tribe, or a section of it, continued its southern march until it reached the well-watered and fertile valley of the Helmand, between N. lat. 30° 30′ and 32°, and E. long. 60° 30′ and 64°. This region was occupied in such force by the Śakas that it became known as Śakastēnē, or the Śaka country, a name which still survives in Persian forms as Sejistān or Sīstān. From this main settlement the tribe, travelling through Kandahār, penetrated into India in considerable numbers. It is probable that another section of the Śakas may have entered India by the Kābul route. The invaders succeeded in establishing Śaka dynasties in at least three places, Taxila, Mathurā, and Kāṭhiāwār. The rulers of Saurāṣṭra, or Kāṭhiāwār, like their northern clansmen, assumed, or received, the Persian title of Satrap, and are conveniently distinguished as the Western Satraps.

The distance from the Oxus to Girishk on the Helmand is not less than 500 miles, and cannot have been traversed by an invading horde without much resistance and fighting. The arrival of the Śakas at Kandahār and the Indian frontier may be dated in round numbers about B.C. 150, ten years after their defeat by the Yueh-chi.

This approximate date, deduced from the testimony of the Chinese historians, is strongly confirmed by the Indian numismatic evidence. It is certain that Śoḍāsa, Śaka Satrap of Mathurā, was the son of Satrap Rājuvula. It is equally certain that the hemidrachms of the latter imitate, and are found with, those of Strato II, who was son of Strato I, who was contemporary with Heliokles, the last Greek king

north of the Hindū Kūsh, who was almost certainly a son, and certainly was the successor, of Eukratides, who died about B.C. 150. Cunningham places the death of Eukratides about B.C. 160, others assume the date to be about 147. Inasmuch as Heliokles, the successor of Eukratides, was contemporary with Strato I, the father of Strato II, who was approximately contemporary with Rājuvula, the Śaka Satrap of Mathurā, the date of the last-named prince must be very close to B.C. 120, and his son Śoḍāsa cannot possibly be much later. These approximate dates harmonize admirably with the date B.C. 150 for the Śaka invasion of India, as deduced from the Chinese histories.

The way is now clear for an examination of the dated inscriptions of the Northern Satraps. Śoḍāsa, the Satrap of Mathurā, is proved by two independent lines of evidence, Chinese and numismatic, to have been reigning at a date later than 120 and very close to B.C. 110. His Mathurā inscription is dated in the year 72, and that date must be interpreted so as to harmonize with the ascertained fact that Śoḍāsa was in power in or about B.C. 110. The theory that the date is to be treated as referring to the Vikrama era is clearly out of court, because 72 − 57 = A.D. 15, which date is absolutely impossible. Reference to the Śaka era of A.D. 78 is, of course, still more out of the question.

Before enunciating the apparently true solution, it is desirable to discuss the other important inscriptions. The Taxila copper-plate is an official document recording certain grants made to a Buddhist monastery near Taxila by Patika, the son of the Satrap Liaka Kusulaka, whose endorsement is recorded on the grant, in token of approval. The date is expressed as "in the seventy-eighth year—78—[in the reign] of the great king Moga, on the fifth, 5, of the month Panema," during the time of Liaka Kusuluka, Satrap of Cahara and Cukhsa, whose son is Patika.

The numerous undated memoranda on the curious lion capital found at Mathurā connect the Taxilan Satraps Liaka and Patika with Rājuvula and Śoḍāsa, their colleagues at Mathurā. Two of the gifts recorded in the memoranda on

the lion capital are expressly stated to have been made while Śoḍāsa was Satrap, and a third inscription mentions Patika by his title of Satrap. These memoranda of gifts made to a Buddhist monastery at Mathurā by the two families of Satrap rank, one ruling at Taxila and the other at Mathurā, must therefore be later in date than the Taxila copper-plate, which was inscribed before Patika had succeeded his father Liaka as Satrap of Taxila, under the suzerainty of Moga. Considering the connection which plainly existed between the two families, we must believe that the inscription of Satrap Śoḍāsa at Mathurā dated 72 is recorded in the same era as the inscription of Satrap Liaka at Taxila dated 78.

I venture to affirm with confidence that these dates can be explained and reconciled in one way only, by treating them both as Laukika dates of the thirtieth centennium. The fact must always be borne in mind that two independent lines of evidence have established that Śoḍāsa, the son of Rājuvula, was in power about B.C. 110. The manner in which all the facts can be harmonized by assuming that the dates 72 and 78 are Laukika dates will be readily understood from examination of the following tabular statement, which exhibits the chronology in a convenient form.

B.C.	Greek Kings.	Śaka and Parthian Kings.	Princes of Mathurā.	Princes of Taxila.	Remarks.
	North and South of Paropanisus.		*Rājas.*		
c. 180	Eukratides, acc. ...	... ...	Gomitra	... ...	Plato (B.C. 165)* and several other Greek kings were contemporary with Eukratides.
c. 170	... ...	... ...	Rāmadatta, etc.		
*165	... ...	... ...	(order of succession doubtful)	... ...	Migration of Yueh-chi from China.
c. 160	War with Śakas ...	... ...	... ...	... ...	Śaka occupation of Kapiśa (Ki-pin).
c. 155	War with Demetrius, king of the Indians	... ...	... ...	... ...	*See* Justin, bk. vi, ch. xli.
c. 150	Heliokles, acc. ...	... ...	... ...	... ...	Śaka invasion of India.
	South of Paropanisus.		*Satraps* (Śaka).		
c. 140	Strato I, acc. ...	... ...	(1) Hagāna and Hagāmāṣa, acc. (probably brothers)	... ...	Hagāna and Hagāmāṣa copy the coins of the Rājas.
c. 130	Strato II, acc.				
c. 125	... ...	... ...	(2) Rājuvula, acc.	... ...	Rājuvula's early coins copy those of the Rājas; his later issues copy those of Strato II.
c. 120	... ...	(1) Moga (Maues), acc. (? Śaka)			

				Satraps (Śaka).	
c. 115	... ...	... ...	... ...	(1) Liaka, acc.	
c. 110	... ...	... ...	(3) Śoḍāsa, acc. (son of No. 2)		
*105	... ...	... ...	Inscr. of Śoḍāsa, year 72 = Laukika 2972		
c. 100					
*99	... ...	... ...	... ...	Taxila inscription of Liaka, year 78 = Laukika 2978 (subordinate to Moga)	
c. 95	... ...	(2) Vonones (*a*) (Onones)	... ...	(2) Patika, acc. (son of No. 1)	(*a*) Spalyris (king's brother), Spalahores, Spalagadames, and Azes subordinate.
c. 80	... ...	(3) Spalyris (*b*) (brother)	Lion pillar inscription of Śoḍāsa	Lion pillar inscr. of Patika	(*b*) Spalagadames and Azes subordinate.
c. 50	... ...	(4) Azes I (*c*)	... ...	... ...	(*c*) *Stratêgos* Aspavarma and Azilises subordinate.
c. 30	... ...	(5) Azilises (*d*)	... ...	(3) Mevaku or Mevaki, acc.	(*d*) Azes II subordinate.
c. A.D. 1	... ...	(6) Azes II			
*21	... ...	(7) Gondophares			
c. 50	... ...	(8) Orthagnes (? brother)			
c. 70	... ...	(9) Abdagases, and others			
c. 90–5	... ...	Kadphises II, Kuṣana, conquered India			

* Ascertained dates.

The approximate date of Eukratides is known from Justin (Bk. vi, ch. xli) and from study of his coins. It is practically certain that Heliokles was one of his sons. Strato I and Heliokles re-strike each other's coins, and must therefore be contemporary. Strato II is proved by his coins, which expressly state the fact, to be the son of Strato I. He was evidently a little earlier in date than the Satrap Rājuvula, whose coins closely imitate his, and have been found at Mathurā associated with them in one hoard. The earlier coins of Rājuvula imitate those of the Hindū Rājas who preceded him. The Satraps Hagāna and Hagamāṣa, whose coins are also in the Hindū style, must come between the Hindū Rājas of Mathurā and the Satrap Rājuvula. The order of succession of the several Rājas is not easy to determine. Paṇḍit Bhagvān Lāl Indrajī believed Rāmadatta to be the earliest, and he may have been right. Śoḍāsa, whose coin types revert to Hindū models, declares himself on his coins to be the son of Rājuvula.

Previous writers have treated the Satraps of Mathurā and those of Taxila as one dynasty, and have lumped them together as the Northern Satraps. But there were certainly two dynasties—one at Taxila, the other at Mathurā. The very curious collection of memoranda of pious Buddhist donations recorded all over the lion capital found at Mathurā proves that Śoḍāsa and Patika were both Satraps when the inscriptions were recorded. Patika is known from the Taxila copper-plate to have been the son of the Satrap Liaka, who was still in power in the year 78, equivalent to B.C. 99. The Satrap Mevaku or Mevaki is known from a coin and an inscription on the lion capital. He probably succeeded Patika, at Taxila.

The Parthian dynasty from Vonones (Onones of the coins) onwards is given as correctly worked out by Mr. Bhāndārkar, who is, however, in error in the place he assigns to Maues. That prince seems to be identical with Moga, who is known from the Taxila copper-plate to have been the suzerain of Liaka, and he must be placed about B.C. 120, as he was placed long ago by the best numismatists.

The arrangement in my table seems not to be at variance with any known fact or probability, and to harmonize accurately with the approximate date for the Śaka invasion of India as deduced from the Chinese histories. I therefore feel justified in believing that the outline of the history of a very obscure period has now been correctly drawn.[1]

V. *Indo-Roman Art and the Newer Buddhism.*

The theory that the Kuṣana dates expressed in figures lower than 100 are to be interpreted as referring to the Laukika era has the merit, I believe, of making possible a satisfactory explanation of the genesis and chronology of the Indo-Roman, or so-called Græco-Buddhist, art of Gandhāra.

Sir Alexander Cunningham's mature opinion in January, 1889, was to the effect that all the greater works, both of sculpture and architecture, should be ascribed to "the flourishing period of Kushán sway under Kánishka, Huvishka, and Vásudeva, or from 80 to 200 A.D." When I was reviewing the whole subject of Gandharian art in the same year I found a difficulty in reconciling the clear evidence of the influence of cosmopolitan Roman models on that art with the date assigned by Cunningham, and therefore wrote:—

"I cannot say what circumstances caused the establishment at Pesháwar of this peculiar local school, but I do not agree with Sir A. Cunningham in associating it with Kanishka and his immediate successors of the Kushán dynasty, A.D. 80 to 200. On

[1] The principal references are:—Gardner, *B.M. Catal. Greek and Scythic Kings*, Introd.; Rapson, "Indian Coins," pp. 5–9; Von Sallet, "Die Nachfolger Alexanders des Grossen"; Cunningham, "Coins of Ancient India," p. 87; D. R. Bhāndārkar, "A Kushana Stone Inscription," pp. 15–25; R. G. Bhāndārkar, "A Peep into the Early History of India," pp. 17, 24. The spelling of the name of the Satrap Rājuvula varies. I have followed the spelling used by Paṇḍit Bhagvān Lāl Indrajī, who has discussed (with Mr. Rapson's and Dr. Bühler's aid) the inscriptions on the lion capital and the coins of the Northern Kṣatrapas in *J.R.A.S.*, July, 1894, pp. 524–554. I am now satisfied that the date of Śoḍāsa's Mathurā inscription is 72, not 42.

the contrary, I am of opinion that the earliest works of the Romano-Buddhist school of Peshāwar date from about A.D. 200, and that all the sculptures of any considerable degree of artistic merit were executed between that date and A.D. 350. The style probably lingered in decay as late as A.D. 450, but not later."[1]

But, now that Kaniṣka has been moved to a later date, it is possible to reconcile Cunningham's opinion with the clear recognition of the fact that Gandharian art is closely related to the art of the Roman empire in the Augustan and Antonine periods. I am now fully satisfied that the brilliant development of a semi-European school of art at Peshāwar and in the surrounding countries was the direct result of the patronage and zeal of the powerful Kuṣana monarchs, whose coinage so plainly shows the influence of Roman models. The revised dates for Kaniṣka and his successors harmonize the development of the sculptor's and engraver's arts, which are thus brought into intelligible relation with the history of art in the Roman Empire.

If the tradition be accepted that Kaniṣka became a convert to Buddhism a good many years after his accession, the date of his conversion may be placed between A.D. 130 and 140, say in A.D. 135. At that time the reign of Hadrian was drawing to a close, and the Antonine period (A.D. 138–192) was about to begin. Palmyra was in its glory, and was the great meeting-place of the ideas of East and West, which were in constant communication through the arts of both war and peace. There is no difficulty in understanding that at such a time the foreigner who was lord of India shared with his neighbours of the West the imitative admiration for the cosmopolitan development of Hellenistic art which obtained a worldwide diffusion through the agency of the arms and commerce of imperial Rome, and which had already begun to influence the art of the Indian borderlands.

General considerations of this kind are supported and confirmed by several items of particular evidence. The

[1] "Græco-Roman Influence on the Civilization of Ancient India": *J.A.S.B.*, vol. lviii, pt. 1, pp. 149, 172.

Buddhist statues at Mathurā, which bear epigraphs dating from the reigns of Kaniṣka and his successors, clearly belong to the Gandharian school.

A coin of Huviṣka was found along with the larger of two panels executed in the best style of Indo-Roman art, which were disinterred at Takht-i-Bahāī in 1897.[1]

Two copper coins of Kaniṣka, evidently intended as a foundation deposit, were found embedded in the floor of the basement of the Sanghao monastery, in which some of the finest examples of the Gandharian school were discovered.[2]

Coins of Vāsudeva were found associated with the Jamālgaṛhi sculptures.[3]

Dr. Stein's brilliant researches in Khotan have proved the extension of Indo-Roman art to that remote region. The Buddhist sculptures resembling those of Gandhāra which he found in the enclosure of the Rāwak *stūpa* in the Khotan desert were associated with nearly a hundred coins of the Later Han Dynasty of China, which flourished from A.D. 25 to 220.[4] An exceptionally fine piece of sculpture found at Loriyān Tangai, at the entrance to the Swāt Valley, confirms the numismatic evidence of date. This work is an elaborately carved slab 2 feet 9 inches high and 15 inches wide. One-fourth of the total height consists of a foot in the form of an inverted lotus. The principal figure in the composition is a Buddha in the attitude of contemplation seated on a lotus under a canopy, which is supported by Persepolitan pillars, with capitals consisting of an abacus supported by Indian humped bulls placed back to back. The globular bases and the shafts of these pillars are only slightly enriched duplicates of pillars

[1] *J.R.A.S.*, 1899, p. 422. The name is sometimes written Takht-i-Bahi.

[2] Cole: "Second Report of the Curator of Ancient Monuments in India," 1883, p. cxx. When writing my paper in 1889 I unfortunately quoted the *Third Report*, which accidentally misrepresents the details as to the position of the Kaniṣka coins at Sanghao. I saw that an error existed, but could not point out its nature. The difficulty has now been cleared up by comparison with the *Second Report*, which is perfectly intelligible.

[3] Cunningham: *Reports*, v, 194. The name is also written Jamālgiri.

[4] "Preliminary Report on Archæological Exploration in Chinese Turkestan," London, 1901.

of the second century A.D. at Nāsik. (Burgess, *J.I.A.*, Jan., 1900, p. 83.) The carving is deeply undercut, and the slab is cut right through so as to detach the greater part of the central figure, as well as the pillars supporting the canopy. The frieze at the bottom of the slab and immediately above the lotus foot is carved with a procession of small figures carrying a great roll.

The evidence now available, as above summarized, clearly establishes the facts that the *best* works of the Gandharian school are associated with the reigns of the great Kuṣana kings, and comprised between the dates A.D. 100 and 300.

Buddhism, it must be remembered, had been introduced into the countries on the north-western frontier of India as early as the reign of Aśoka in the third century B.C.; and a Yueh-chi king in B.C. 2 was, as we have seen, so far interested in the religion of Gautama as to communicate Buddhist scriptures to a Chinese envoy. Buddhist sculpture of some sort must therefore have been known in those regions for centuries before Kaniṣka, but it was not then the product of an organized school under liberal and powerful royal patronage, and the remains of this early Buddhist art are rare. When the great monarch Kaniṣka actively espoused the cause of Buddhism, and essayed to play the part of a second Aśoka, the devotion of his co-religionists received an impulse which speedily found expression in the copious production of artistic creations of no small merit.

But it would, I think, be a mistake to regard the Gandhāra school of art, and the religious emotions of which it is the expression, merely as Indian products, and solely the result of local events, whether the natural development of indigenous speculation or the conversion of an Indian king.

The religious system which found its best artistic exponents in the sculptors of Kaniṣka's court is largely of foreign origin. Primitive Buddhism, that which is expounded in the Dialogues of the Buddha so well translated by Professor Rhys Davids, was a purely Indian product based on the Indian ideas of rebirth, of the survival and transmission of *karma*,

or the nett result of human action, and of the blessedness of escape from the pains of being. Primitive Buddhism added to these theories, which were the common possession of Indian thought, a practical system of ethics inculcating a Stoic devotion to duty for its own sake, combined with a tender regard for the feelings of all living creatures, human or animal, and so produced a combination of intellect and emotion which deserves the name of a religion, even though it had no god.

But when the conversion of Aśoka made the fortune of Buddhism it sowed at the same time the seeds of decay. The missionaries of the imperial preacher and their successors carried the doctrines of Gautama from the banks of the Ganges to the snows of the Himālaya, the deserts of Central Asia, and the bazaars of Alexandria. The teaching which harmonized exactly with all the inmost feelings of a congregation in Benares could not without essential change move the heart of the sturdy mountaineer, the nomad horseman, or the Hellenistic Alexandrian. The moment Indian Buddhism began its foreign travels it must necessarily have begun to change. The history of the transformation of Buddhism by foreign minds in strange lands has not been preserved. We know that the transformation occurred, both because it was inevitable, and because we see the results, but we do not know, nor shall we ever know, the steps by which the great change was effected.

One of the principal agencies in effecting the momentous change undoubtedly was the unification of the civilized world, excepting India and China, under the sway of the Roman emperors. The general internal peace of the empire was not much affected by frontier wars, palace revolutions, or the vagaries of half-mad emperors. During that long-continued peace nascent Christianity met full-grown Buddhism in the academies and markets of Asia and Egypt, while both religions were exposed to the influences of all-surrounding paganism and of the countless works of art which gave expression to the ideas of polytheism. The ancient religion of Persia contributed to the ferment of

men's ideas, excited by the novel facilities of communication and the incessant conflict of rival civilizations.

In this environment Buddhism was transmuted from its old Indian self into a practically new religion. The specially Indian ideas on which it had been founded sank into comparative obscurity, and new ideals came to the front. The quietist teacher of the begging friars, who had counted as a glorious victory the recognition of the truth, as he deemed it, that "after this present life there would be no beyond," and that "on the dissolution of the body, beyond the end of his life, neither gods nor men shall see him,"[1] was gradually replaced for his foreign disciples by a divinity ever present to the hearts of the faithful, with his ears open to their prayers, and served by a hierarchy of Bodhisattvas and other beings, as mediators between him and sinful men. In a word, the veneration for a dead Teacher passed into worship of a living Saviour. This is, as I understand it, the essential difference between the old Indian Buddhism, the so-called Hīnāyāna, or Lesser Vehicle, and the newer Buddhism, the so-called Mahāyāna, or Greater Vehicle.[2]

The sculptures of the Gandhāra school, as Herr Grünwedel, M. Foucher, and Dr. Burgess have essayed to prove in detail, seem to be products of Mahāyānist Buddhism. Our ignorance of the archæology of Afghānistān and the regions beyond, and, I may add, our very imperfect knowledge of the archæology of the Pañjāb, prevent us from tracing the early stages of the evolution which resulted in the enormous artistic output of the Gandhāra school. On another occasion I may perhaps attempt to carry a little further than has yet been done the investigation into the history of Gandharian art. At present I merely desire to point out that the chronological framework in which I propose to set alike the Kuṣana dynasty and the best period of that art seems to me to be equally adapted for the correct historical setting of the Mahāyānist development of Buddhism.[2]

[1] "Dialogues of the Buddha," pp. 54, 55, 240.

[2] My views as to the origin and meaning of the Mahāyāna have been partly suggested by Minayeff's "Recherches sur le Bouddhisme," Paris, 1897. The Hashtnagar inscription proves that fairly good work of the Gandharian school was done in the fourth century A.D., but the *best* work is all earlier than A.D. 300.

The age in which Palmyra flourished as the chief inland emporium for the commerce between the East and West, from A.D. 105 to 273, was, I believe, the age in which the Mahāyāna religion assumed a definite form beyond the borders of India, and during which Gandharian art, the outward expression of that religion, was at its best. The foundations of the Mahāyāna system must have been laid, as I have said, when the missionaries of Aśoka brought primitive Indian Buddhism into contact with foreign modes of thought and alien philosophies, religions, and arts.

Within the borders of India, the rapid development of that half-foreign system was doubtless due in large measure to the active patronage of the foreign king Kaniṣka, who played, so far as his power extended, the part in relation to the newer Buddhism which his prototype Aśoka had played in relation to the ancient Indian doctrine.

VI. *Synchronism of Indian and Foreign Histories.*

Although India has more than once succeeded in isolating herself for centuries and in effecting an almost complete exclusion from her borders of foreign arts, manners, and ideas, she has not always been able to maintain the insulation which she loves. The rude and vigorous foreigner from time to time either forces the gates of her mountain walls, or, more insidiously, secures a footing in her seaports, and thence works his way into the innermost parts of the Brahmans' land. During all the long ages which preceded Alexander's daring raid, India had remained, in spite of some commercial intercourse and of the political relations of the north-western corner with the Persian Empire, a land unknown to the western nations. The veil was lifted for a moment by the Macedonian conqueror, and a few years after his death was still further raised by the reports of Megasthenes, a discerning and intelligent observer, and the first European who had seen with his eyes the actual working of the institutions of ancient India in the interior

of the country. The missionary efforts of Aśoka, while they wrought a deep and enduring effect on the religions and philosophy of the West, and, on the other hand, facilitated the introduction of certain Occidental arts and ideas into India, did not bring East and West so closely into contact as to establish any vital relation between the political history of one and that of the other. When we note the fact that during the reign of Aśoka, Rome and Carthage were engaged in the first act of their long and tragic struggle, the statement of the fact is a mere chronological memorandum. Rome was nothing to Aśoka, and Aśoka was nothing to Rome.

But when the whole of the civilized world, excepting only the antique realms of India and China, passed under the sway of the Cæsars, and the empire of Kaniṣka marched, or almost marched, with that of Hadrian, the ancient isolation of India was infringed upon, and Roman arts and ideas travelled with the stream of Roman gold, which flowed into the treasuries of the Rājas in payment for the silks, gems, and spices of the Orient. During the Kuṣana period the Roman influence on India was at its height, and it is impossible to understand or tell aright the history of Kaniṣka without reference to that of Hadrian and his predecessors. In those days, too, the relations of India with the empires of Parthia and China were neither infrequent nor unimportant. The amount of our positive knowledge of the commercial, artistic, religious, and political bonds connecting the empire of Kaniṣka with the empires ruled by the three other 'Sons of Heaven' in Rome, Parthia, and China, is, it is true, lamentably small and miserably fragmentary.[1] Nevertheless, we know that such bonds did

[1] The Yueh-chi continued to be a great power in Asia long after their dominion in India to the east of the Satlaj had been superseded by the conquests of Samudra Gupta about A.D. 340. A curious notice of India by the śramana Kālodaka, translated into Chinese in A.D. 392, enumerates four 'Sons of Heaven' (Chinese, *t'ien-tzen*; Sanskrit, *devaputra*) as existing in the world, namely, the emperor of China (*Tsin*) in the east, the emperor of India in the south, the emperor of Rome in the west, and the emperor of the Yueh-chi in the north-west. The Chinese dynasty at that date was that of the Eastern Tsin, A.D. 317–420. (Lévi, "Notes sur les Indo-Scythes," p. 64, note.) In the year

exist, and we can sometimes discern the mode of attachment. I have, therefore, prepared a somewhat elaborate synchronistic table correlating the history of Northern India during the Kuṣana period with the histories of the contemporary empires. The accuracy with which all these histories fit together according to my reconstruction of the Indian chronology is to my mind, as I hope it may be to the minds of my readers, a cogent argument in support of the general soundness of that reconstruction.

392 Candra Gupta II of the Gupta dynasty was emperor of India, and at the height of his power. The Yueh-chi empire was shattered and broken up into small principalities by the shock of the Ephthalite or White Hun invasions in the fifth century. These small states continued to exist up to the time of the Arab conquest of Turkestan. (Drouin, "Monnaies des Grands Kouchans," *Rev. Num.*, ser. III, t. xiv, p. 171.) The White Huns also destroyed the Gupta empire in India.

SYNCHRONISTIC TABLE

OF THE

KUṢANA (KUSHĀN) PERIOD.

B.C.	EVENT.
165	Expulsion of the main horde of the YUEH-CHI from Chinese Turkestan by the Hiung-nu.
,,	Ephemeral Bactrian king Plato, contemporary with Eukratides.
c. 163	Nan-tiu-mi, chief of the Wu-sun, killed by the Yueh-chi.
c. 160	Occupation of the ŚAKA (Se) territory by the Yueh-chi; retirement of the Śakas southward into Ki-pin (Kapiśa).
c. 160–150	War between Eukratides and Demetrius, 'king of the Indians'; conflicts of the Greek kings with the Śakas.
c. 150	Heliokles succeeded Eukratides; Śaka invasion of India.
c. 140	Yueh-chi expelled from former Śaka territory by Koen-muo, the young Wu-sun chief, son of Nan-tiu-mi; extinction of Greek dynasty north of Paropanisus; Strato I acc. in Pañjāb; Hagāna and Hagāmāṣa Satraps of Mathurā.
c. 138	Reduction of the Ta-hia, both north and south of the Oxus, to vassalage by the Yueh-chi, who begin to settle down.
c. 135	Dispatch by Chinese *emperor* Wu-ti of Chang-k'ien on mission to the Yueh-chi.
c. 130	Strato II acc. in Pañjāb.
c. 125	Arrival of Chang-k'ien at Yueh-chi royal camp, north of the Oxus; Rājuvula Satrap of Mathurā.
c. 122	Return of Chang-k'ien to China.
c. 120	Moga (Maues), ? Śaka king of Kābul and Pañjāb, acc.
c. 115	Liaka, Satrap of Taxila, acc.
c. 114	Death of Chang-k'ien.
c. 110	Śoḍāsa, Satrap of Mathurā, acc.

B.C.	EVENT.
105	Inscription of Śoḍāsa dated 72 = Laukika 2972.
99	Inscription of Liaka, Satrap of Taxila, dated 78 = Laukika 2978.
c. 95	Yonones (Ononès) succeeded Moga (Maues) as king; Patika succeeded Liaka as Satrap of Taxila.
c. 90	Inscriptions of the Satraps Śoḍāsa and Patika on lion capital at Mathurā.
c. 70	Extension of Yueh-chi settlements to south of Oxus; occupation of the Ta-hia capital Lan-sheu.
c. 65	Formation of five Yueh-chi principalities, including Bāmiyān and KUṢANA (KUSHĀN); murder of Chinese officer by king of Ki-pin, in reign of emperor Siuen-ti (73–49); Syria made a Roman province.
57	Epoch of the Mālava or Vikrama era.
53	Defeat of Crassus by the Parthians at Carrhæ.
44	Assassination of Julius Cæsar.
42	Battle of Philippi.
c. 40	Refusal of Chinese emperor Yuen-ti (48–33) to resent insult offered to his envoy by In-mo-fu, king of Ki-pin.
31	Battle of Actium.
30	Roman conquest of Egypt.
c. 25	Refusal of Chinese emperor Ching-ti (32–7) to acknowledge an embassy from king of Ki-pin.
20	Recovery of standards of Crassus from the Parthians by Augustus.
c. 13	Indian embassy to Augustus.
2	The Chinese graduate King-hien, or King-lu, instructed in Buddhist books by the king of the Yueh-chi.
A.D.	
8	Temporary cessation of intercourse between China and the West (*Siyu*).
14	Tiberius, Roman emperor, acc.; death of Augustus.
c. 21	Gondophares, Indo-Parthian king, acc.
c. 24	First, or Early, Han Dynasty of China ended.
c. 30	Jihonia (Zeionises), Satrap in the Pañjāb.

A.D.	EVENT.
38	Caius (Caligula), Roman emperor, acc.
41	Claudius, Roman emperor, acc.
c. 45	KADPHISES I, KUṢANA (= K'iu-tsiu-koh, Kozola Kadaphes, etc.), acc.
c. 45–60	Consolidation of the five Yueh-chi principalities into KUṢANA EMPIRE under KADPHISES I; complete conquest by him of Kābul, Bactria (Po-ta), and Kapiśa (Ki-pin); Hermæus, Greek king, contemporary in Kābul and Pañjāb.
54	Nero, Roman emperor, acc.
c. 56	Kaladara inscription of Theodore, dated 113.
c. 65	Panjtār inscription dated 122.
67	Buddhist books brought to China by order of emperor Ming-ti.
68, 69	Galba, Otho, and Vitellius, Roman emperors.
70	Vespasian, Roman emperor, acc. (22nd Dec., 69).
77	Publication of Pliny's Natural History.
78	Epoch of the Śaka or Śālivāhana era.
79	Titus, Roman emperor, acc.
81	Domitian, Roman emperor, acc.
c. 85	DEATH OF KADPHISES I, at age of 80; KADPHISES II (= Yen-kao-chin, Hima Kadphises, etc.), acc.; the 'Nameless King,' Soter Megas, contemporary and subordinate.
90	Yueh-chi defeated by Chinese, and compelled to pay tribute.
c. 95	Annexation of Northern India, and destruction of the Indo-Parthian power by Kadphises II.
96	Nerva, Roman emperor, acc.
98	Trajan, Roman emperor, acc.
105	Overthrow by the Romans of the Nabatæan kingdom of Petra; rise of Palmyra.
c. 107	Indian embassy to Trajan.
116	Conquest of Mesopotamia by Trajan.
117	Hadrian, Roman emperor, acc.; retrocession of Mesopotamia.
123–126	Residence of Hadrian at Athens.

A.D.	EVENT.
c. 125	KANIṢKA KUṢANA emperor, acc.
129	Earliest known date (year 5 = 3205 Laukika) of Kaniṣka.
c. 130	Conquests of Kaniṣka beyond the Karakoram (Tsung-ling) mountains; his war with king of Pāṭaliputra.
131–136	War of Hadrian with the Jews.
c. 135	Conversion of Kaniṣka to Buddhism.
138	Antoninus Pius, Roman emperor, acc.
c. 140	Buddhist Council in (?) Kaśmīr.
150	Jūnāgaṛh inscription of Rudradāman, Western Satrap.
152	Latest known date of Kaniṣka.
153	HUVIṢKA KUṢANA emperor, acc.
161	Marcus Aurelius Antoninus, Roman emperor, acc.
162–165	Parthian Vologeses III defeated by the Romans.
175	Eastern campaign of Marcus Aurelius.
180	Commodus, Roman emperor, acc.
184	Latest known date of Huviṣka.
c. 185	VĀSUDEVA KUṢANA emperor, acc.
192, 193	Pertinax and Julianus, Roman emperors.
193	Septimius Severus, Roman emperor, acc.
198	Earliest known date of Vāsudeva.
c. 200	Palmyra created a Roman colony.
211	Caracalla, Roman emperor, acc.
216	Parthian expedition of Caracalla.
217	Macrinus, Roman emperor, acc.
218	Elagabalus, Roman emperor, acc.
222	Latest known date of Vāsudeva; Alexander Severus, Roman emperor, acc.
c. 225	Death of VĀSUDEVA.
226	Foundation of Sassanian dynasty of Persia.

A.D.	EVENT.
? *c.* 242	Mathurā inscription dated 299.
260	Defeat of Valerian, Roman emperor, near Edessa, by Sapor, king of Persia.
c. 261	Loriyān Tangai inscription dated 318.
266	Assassination of Odenathus, ruler of Palmyra.
273	Capture of Palmyra, and of Queen Zenobia, by Aurelian, Roman emperor.
310	Sapor (Shahpūr II), king of Persia, acc.
320	CANDRA GUPTA I, acc.; establishment of Gupta era; marked revival of Brahmanism.
c. 327	Hashtnagar inscription, dated 384.
363	Death of Julian, Roman emperor, near the Tigris.

VII. *Conclusion.*

I have now performed the task which I imposed on myself of endeavouring to prove that my solution of the question of the Kuṣana chronology satisfies all the conditions of the problem. Many of my readers, if not all, will, I venture to hope, be convinced that the Laukika era was extensively used in ancient India, and that there is no improbability in supposing that private donors in northern India during the second and third centuries of the Christian era recorded dates according to the Laukika computation. The fact is certain that the Laukika notation alone permits a date to be ordinarily expressed by the mention of the units and tens only, the hundreds and thousands being omitted. The series of Kuṣana dates from 4 to 98 being apparently expressed in this fashion, and the presumption being that they should be referred to the only era known to be associated with that mode of notation, the burden of proving them to refer to some other era lies on the party objecting to my simple supposition. The attempts which have been made to prove that one or other of three eras other than the Laukika is referred to have all failed, and the Laukika alone holds the field. A reasonable and natural interpretation of the texts of the Chinese historians who narrate the story of the aggrandizement of the Kuṣanas fits in exactly with my explanation of the dates. When that explanation is adopted, Indian history dovetails naturally into the history of the Roman, Persian, and Chinese empires. The explanation is in no way opposed to the palæographical facts of coin legends or stone inscriptions, and is not inconsistent with the testimony of inscriptions dated in eras other than the Laukika. It is also consistent with a reasonable theory of the development both of Gandharian art and of Mahāyānist Buddhism.

A friendly critic who has read my proof-sheets points out that there is some obscurity in my account of the Śaka

migration (pp. 19, 22, 25, 26, 28, 43). The Śakas are described as being expelled by the Yueh-chi, who were moving from east to west, and also as having fled to the south, as stated by Ssu-ma-ch'ien. I assumed in my text that the Śakas were driven *westward* into the country north of the Oxus, and that they then turned *south* and passed through Bactria into both Kābul and Sīstān, but this assumption has not been clearly stated. My critic suggests that the Śakas occupied Eastern or Chinese Turkestan to the east of the Pāmirs, and that they turned south into India through the Karakoram passes and by the Chitrāl road. The original seat of the Śakas probably was in the Yarkand and Kashgar country, and it is quite possible that detachments of the horde reached Kābul and India *viâ* Chitrāl. But the large body which occupied Sīstān must surely have come through Bactria.

I understand that the Ta-hia, previous to their subjugation by the Yueh-chi, occupied the country both north and south of the Oxus to the west of the Pāmirs.

I hope that Chinese scholars will be able to make clear what the original position of the Se or Śakas really was; the books which I have read do not make the matter plain.

The relations between the Śakas and Parthians are so extremely obscure that I cannot feel much confidence in the arrangement suggested by me. But I am quite certain that Professor Bhāndārkar is right in his arrangement of the order of the Indo-Parthian kings from Vonones to Azes II, as given in my table, p. 47.

V. A. SMITH.

November 20th, 1902.

Art. II.—*The Lineal Measures of Fa-hian and Yuan Chwang.*

By Major W. Vost, I.M.S.

I. Yuan Chwang.

The two principal terms of lineal measure adopted by Fa-hian, Yuan Chwang, and other Chinese pilgrims, in their narratives of the different countries in India and on its frontiers, are the *yojana* and the *li*.

A decision, which has been accepted by everyone, has not yet been arrived at as to what these terms exactly represent in the lineal measures of our own time. Until such a conclusion as is beyond doubt has been determined, the exact understanding of the accounts these travellers have left us is absolutely impossible. Their narratives contain by far the most exact data we have for the ancient geography of India in the fifth, sixth, and seventh centuries of the Christian era.

The various estimates of the value of the yojana of Fa-hian and Yuan Chwang are extremely perplexing. Yuan Chwang's yojana has been valued by H. H. Wilson at 4 English miles; by General Cunningham at 6·75; by Mr. V. A. Smith at about 6·5; and by Julien at 8. That of Fa-hian has been estimated by General Cunningham at 6·71 English miles; by Sir H. M. Elliot at 7; by Mr. V. A. Smith at about 7·25; and by Giles at 5 to 9. From what Dr. M. A. Stein states, in his *Memoir on Maps illustrating the Ancient Geography of Kaśmīr*,[1] it would appear that the yojana round about the present capital, Srīnagar, was equivalent to 8 English miles in the days of Yuan Chwang.

[1] J.A.S.B., 1899, vol. lxviii, pt. 1, extra No. 2, pp. 16. 138.

Yuan Chwang gives an account of the measures of length and distance in India in his *Records*, but unfortunately his description of them is not very clear. It is as follows:—"In point of measurement, there is first of all the *yojana* (*yu-shen-na*); this from the time of the holy kings of old has been regarded as a day's march for an army. The old accounts say it is equal to 40 *li*; according to the common reckoning in India it is 30 *li*, but in the sacred books (*of Buddha*) the *yojana* is only 16 *li*.

"In the subdivision of distances, a *yojana* is equal to eight *krôśas* (*keu-lu-she*); a *krôśa* is the distance that the lowing of a cow can be heard; a *krôśa* is divided into 500 bows (*dhanus*); a bow is divided into four cubits (*hastas*); a cubit is divided into 24 fingers (*aṅgulis*); a finger is divided into seven barleycorns (*yavas*); and so on . . . ."[1]

General Cunningham,[2] commenting on this passage as it occurs in the French version[3] of Julien, says:—"Hwen Thsang mentions that the *yojana*, according to tradition, was equivalent to 40 Chinese *li*, but that the measure then in use was equal to only 30 *li*. From a comparison of the different pilgrims' recorded distances between well-known places, it appears that Hwen Thsang adopted the traditional measure of the *yojana* as equal to 40 *li*." He then goes on to explain that the yojana of 30 li may be the old Indian yojana of 24,000 feet, about 4½ English miles, divided into 30 Chinese li, each 800 feet, but continues: "it would appear that there must be some mistake in the value of 30 *li* assigned to the Indian *yojana* by Hwen Thsang." In the end he decides to adopt 6·75 English miles as the value of the yojana of Yuan Chwang, because of measurements ascertained between well-known places.

I have quoted General Cunningham rather fully, because by showing where I consider he has misunderstood the meaning of the passage in which the length of the yojanas

[1] Beal: *Buddhist Records of the Western World*, 1885, vol. i, p. 70.

[2] *The Ancient Geography of India*, p. 571 sq.

[3] *Hiouen Thsang*, ii, p. 60.

is mentioned, I hope to be able to clear away the difficulties in connection with the yojana of Yuan Chwang, and arrive at a correct estimate of its value.

My belief is that the passage, in which Yuan Chwang gives us the details of the measures of distance, is intended to convey to his readers this meaning :—In the sacred books of the Buddhists the yojana is divided into only 16 li, or divisions, but following the ancient traditions of the people of India it is usual to divide a yojana also into 40 li, or divisions. According to the present custom in the principalities in India, the yojana adopted corresponds to only 30 li, $\frac{30}{40}$, or three-fourths of the yojana formerly in use.

Julien's version of the passage makes it clear that *a* yojana—any yojana—was customarily divisible by 40. I feel certain that General Cunningham was mistaken in thinking that Yuan Chwang's words give countenance to the supposition, that in the time of this traveller, or previously, there was an "actual Chinese *li* of 30 *li* to the *yojana*," equivalent to $\frac{1}{30}$ of a yojana.

Division by 40 prevails to the present day, and always has prevailed, in the division of a *man* of whatever weight it might happen to be in the different parts of India. This subdivision, $\frac{1}{40}$, is conventionally called a *ser*.

To illustrate what I conceive to be Yuan Chwang's meaning, I will give an example.

A merchant hears that grain is cheap in a certain town, and believes that it would pay him to go there to lay in a stock of it. He has never been to the town before, and knows nothing of the local man and ser. On arrival at the place where he is going to buy grain, he is told by a former acquaintance, who has transacted business at the stranger's town, that the local weights here are $\frac{1}{3}$ heavier than those of his own town. The merchant now knows that $53\frac{1}{3}$ sers, or $40 + \frac{40}{3}$ sers, in weight at his own town, are considered as equal to *one* man in the place to which he has come. The acquaintance of the strange merchant, if asked about the local weights of the stranger's town, would express to his interrogator the weight of the man of the stranger's

town as a fraction of his own man, by saying that the man there 'contains,' 'corresponds to,' 'answers to,' 'is equal to,' 'is,' or 'represents' 30 sers, meaning thereby that it is $\frac{30}{40}$ of the man here, making use of a verb or phrase to do so in exactly the same words that Yuan Chwang has described the yojana of 30 li and other yojanas mentioned by him. To put it shortly, the friend of the strange merchant would say, "It is a man of 30 sers," or the "ser weighs 12 *chaṭāks*."

By means of this mode of expression the meaning is at once conveyed that the man of the stranger's town is one containing only 30 sers of the other town; in fact, that it is $\frac{30}{40}$ of that man, and not that the man is one of which each ser is $\frac{1}{30}$ of the man, because that is impossible, as everyone well knows that a ser cannot be $\frac{1}{30}$ of a man, for the reason that it is the conventional term employed everywhere to express $\frac{1}{40}$ and not $\frac{1}{30}$ of a man.

Yuan Chwang has described the *yojana of* 30 *li* in exactly the same way that the acquaintance of the strange merchant has explained the man of the stranger's town. He did not mean it to be understood that the yojana in use at the time of his visit to India was one divisible by 30 li, because he informs his readers that from the days of old it had been the traditional method of procedure always to divide a yojana into fortieths, except when in detailing distances in Buddhist books it was customary to divide it into sixteenths.

The system of reckoning which I have described is very common[1] throughout the whole of India. It is simple and easily comprehended by those conversant with it. A stranger is, at first, at a loss to understand what is meant.

In the system the denominator of the fraction is always unstated, as it is taken for granted by the speaker that what is meant is evident. The unstated denominator varies in almost every province in India, whether the fraction pertains to land or weight, and requires to be carefully ascertained to understand the value of any particular fraction.

[1] See Prinsep, *Useful Tables*, pp. 111, 113, 115.

It is common enough to hear that someone holds a share worth, say, '3 *ānās*' or '5 ānās' of the lands of a particular estate, or that a certain coin weighs '10 *māṣas*.' The meaning is that the 3 ānā share is equal to $\frac{3}{16}$ of the estate, and that the 10 māṣa coin weighs $\frac{10}{12}$ of a *tolā*. In the 3 ānā share the denominator is 16, because there are 16 ānās in one rupee; and the coin of 10 māṣas is $\frac{10}{12}$ of a tolā, for the reason that there are 12 māṣas in a tolā weight. It is not uncommon to hear the rupee (a silver coin about the size of half-a-crown) of British India, which is the legal tolā, weighing 180 grains, spoken of as weighing 10 māṣas. In such an instance it is evident that the speaker is mentally comparing its weight with some *local tolā*.

To $\frac{1}{40}$ of a yojana Yuan Chwang has given the name of li, perhaps because this name conveyed to his Chinese readers the exact relationship that existed between the Chinese and Indian measures of distance at the time his *Records* was written. It is because the term li has many times varied in its significance, from change of dynasty, that, taken by itself, we are now unable to say to how many yards, feet, and inches of the English table of length the li, as used by Yuan Chwang, now corresponds.

From the frequency with which Yuan Chwang makes use of the li in preference to the yojana in stating distances, it seems to me not unlikely that at the time he wrote his travels, the nearest corresponding measure then used in China and the yojana of India were of different lengths, and conversely, because Fa-hian uses the yojana, except for very short distances, that the yojana of India and the then common measure of distance used in China were of the same value, or approximately so, at the time he came to India.

I understand, then, from Yuan Chwang's account, (1) that at the time he stayed in India, there was only one yojana in general use, which was divided into fortieths, and that he adopted this *yojana of common reckoning*. (2) He further explains that this yojana was $\frac{2}{3}$ of a yojana formerly existing, which had been divided into fortieths according to a traditional custom handed down for centuries, that

any yojana should always have 40 divisions. (3) This custom of dividing a yojana into fortieths was only departed from when detailing distances in the sacred books of Buddha. In them a yojana, of whatever value, was divided into sixteenths.

If my opinion be correct there would thus have been in the time of Yuan Chwang two yojanas: (1) an *old yojana*, which had fallen, or was falling, into disuse, and which had been divided into 40 li; (2) the *yojana of common reckoning*, $\frac{3}{4}$ of the value of the old yojana, and which like it was divided into 40 li.

The old one and the new yojana were each *sacred yojanas* when divided into sixteenths.

How many other yojanas there had been in former times, previous to the *two* yojanas he mentions, he does not tell us. That there were others is more or less certain.

General Cunningham has interpreted Julien's text to mean that there was but *one* yojana, subject to *two* distinct methods of division. By one, the traditional method, and that which was adopted by Yuan Chwang, the Indian yojana was divided into 40 li. By the other method, that which was in use in the Indian kingdoms at the time of the pilgrim's visit, the same yojana was divided into 30 li. General Cunningham expresses his belief that there must be some mistake in assigning 30 li to the Indian yojana. I submit that there is no mistake. The error lay in General Cunningham failing to understand Hiuen Tsiang's meaning.

I think there can be no doubt that, judging from the method of stating fractional parts of land, weight, etc, still prevailing in India, we should understand that the yojana of 30 li, as I have explained, is only a yojana $\frac{30}{40}$ of another yojana, and that it was divided into 40 li, like other yojanas, and not into 30 li as General Cunningham supposed.

Now it only remains to point out a *yojana of 16 li*. I am not aware that General Cunningham has discussed it, or anywhere refers to it.

On the analogy of the yojana of 30 li, that is, one $\frac{30}{40}$,

or $\frac{3}{4}$, of another yojana, we should expect Yuan Chwang to imply that the yojana of 16 li was one $\frac{16}{40}$, or $\frac{2}{5}$, of some other yojana. The distance from Kapilavastu city to the Anomā river is given in the Burmese and Ceylonese accounts as 30 yojanas,[1] and in the *Siu-hing-pen-k'i-king*[2] as 480 li, or 480 'miles' according to Hardy, from which it follows that at one time in Burma and Ceylon there was a yojana of the value of 16 li of the Chinese record. This yojana of 16 li is probably the division of the larger yojana spoken of by Yuan Chwang, if his statement refers to a particular yojana.

When on a visit to Rājagṛha, Anāthapiṇḍika, a merchant of Śrāvastī, became a Buddhist, and invited Buddha to visit Śrāvastī. The distance[3] to Śrāvastī from Rājagṛha was 45 yojanas. Buddha set out to reach the city "by easy stages, *sixteen miles* each day, so that he was forty-five days in travelling from Rajagaha [Rājagṛha] to Sewet [Śrāvastī]."[4]

From this it is plain that Buddha travelled one yojana each day, and that each yojana contained 16 parts, each a *mile*, or, as Yuan Chwang says, a *li*. There can be no doubt that this is one of the *sacred* yojanas of 16 li, which the pilgrim mentions are to be found in the sacred books of Buddha.

On the other hand, it should be noted that in his description of the yojanas Yuan Chwang mentions the yojana of 16 li after the yojana of common reckoning. From this it seems possible that the meaning intended by him is, that the 40 li of the yojana of common reckoning were equal to only 16 li of the sacred yojana he had in mind. The sacred yojana to which he may refer would thus have been in value 100 li of the yojana of common reckoning, because 16 : 40 :: 40 : 100, that is, his sacred yojana was $2\frac{1}{2}$ times the value of the yojana of common

[1] Bigandet: *Life or Legend of Gaudama*, vol. i, p. 64; Hardy: *Manual of Budhism*, p. 164.
[2] *Sacred Books of the East*, vol. xix, p. xxi.
[3] Hardy, p. 224.
[4] Hardy, p. 225; see also pp. 204, 205, 343.

reckoning, as the pilgrim says a yojana was made up of 40 li. The yojana of common reckoning, on this supposition, would have been $\frac{1}{4}\frac{6}{0}$, or $\frac{2}{5}$, of his sacred yojana.

In support of this interpretation of his text, I can cite the distance from the "forest of Yashti" to Rājagṛha, which was 12 miles,[1] or "about 3 gawots."

We have seen that in the distance from Rājagṛha to Śrāvastī each yojana was divided into 16 miles, so that the 12 miles, from the "forest of Yashti" to Rājagṛha, should be equal to $\frac{12}{16}$ of 100 li, or to 75 li, if each sacred yojana was $2\frac{1}{2}$ times the value of some other yojana, and all sacred yojanas in India were divided into 16 parts. The "forest of Yashti" is no doubt the same as the Yaṣṭivana of Yuan Chwang. Fortunately for purpose of comparison, the Chinese pilgrims have left a record of the distances from the Yaṣṭivana to Rājagṛha. The stages given by Yuan Chwang are the following:—

(1) 6 or 7 li south-east, from Yaṣṭivana to a great mountain, and *stupa*.[2]

(2) 3 or 4 li north, from this mountain to the solitary hill of the Ṛiṣi Vyāsa.[3]

(3) 4 or 5 li north-east, from the hill of the Ṛiṣi Vyāsa to the hill in which was the cavern known as the palace of the Asuras.[4]

(4) About 60 li eastward, through the mountains, from the palace of the Asuras to Kuśāgārapura.[5]

(5) About 1 li north, from Kuśāgārapura to the Karaṇḍa-venuvana *vihāra*.[6]

[1] Hardy, p. 196; Bigandet, i, p. 150. The distance from Pāvā to Kuśinagara is variously given as 12 miles, or 3 gavots (Hardy, p. 357; Bigandet, ii, p. 44). A *gavyūti* is usually equal to $\frac{1}{4}$ yojana, or 2,000 bow-lengths each of 96 fingers (Hardy, p. 11*). This requires the yojana from Pāvā to Kuśinagara to have 16 divisions (miles). Occasionally the gavyūti was reckoned as a double one of 4,000 bows, just as there was a double yojana, as in the distance from Kapilavastu to the Anomā river, which was 6 yojanas (Foucaux), or 12 yojanas according to other authorities (Rockhill, p. 25).

[2] Beal, ii, p. 147.

[3] Beal, ii, p. 148.

[4] Beal, ii, p. 148.

[5] Beal, ii, p. 149.

[6] Beal, ii, p. 159.

(6) About 200 paces [= 3·3 li] north, from the [Karaṇḍa]-venuvana vihāra to the Karaṇḍahrada.[1]

(7) 2 or 3 li north-west, from the Karaṇḍahrada to an Aśoka stūpa, and pillar with an elephant capital.[2]

(8) "Not far" north-east, from the Aśoka pillar to Rājagṛha.[3]

The rock-dwelling of the Ṛiṣi Vyāsa must have been very close to, if not actually bordering on, the eastern side of the Yaṣṭivana. I should think it would suffice to allow 2 li as the distance to it from the Yaṣṭivana. The eighth stage may, perhaps, be ignored.

The distances recorded in 3, 4, 5, 6, and 7 come to 72·3, or alternatively to 74·3 li in common reckoning, with 2 li already added for 2.

Fa-hian makes the distance from Kuśāgārapura to the Kalaṇḍa-venuvana vihāra 300 paces,[4] which I believe are equal to 400 paces of Yuan Chwang, against the distance recorded by the later pilgrim of 1 li, which is equal to 60 paces only. The difference is 340 paces, or 5·6 li in common reckoning. On this account the distance of the Yaṣṭivana from Rājagṛha may have been as much as 78 or 80 li in common reckoning, if we accept Fa-hian's distance of 300 paces.

If Yuan Chwang's 1 li be correct some li could be added to 72·3 or 74·3 li for the portion of Old Rājagṛha (Kuśāgārapura) which was traversed by the pilgrim, the figure for which does not seem to be included in his detailed statement.

From the examination of the distances stated, it seems to me no other conclusion can be arrived at than that the value of this mile is $\frac{75}{12}$, or 6·25 li of Yuan Chwang's scale, and

[1] Beal, ii, p. 165.
[2] Beal, ii, p. 165.
[3] Beal, ii, p. 165.
[4] Beal, i, p. lx. Yuan Chwang's account may originally have had 360 paces, which have been altered to 1 li (see remarks on the li).

that at least one of the sacred yojanas, perhaps that referred to by Yuan Chwang, was equal to 100 li in common reckoning.

From Rājagṛha two routes are available to Yaṣṭivana, one by Cakra Ghāṭ, and the other through Kuśāgārapura: the latter is the more direct, but decidedly more difficult way.[1]

The reference to the yojana of 16 li may thus be considered as open to three interpretations:—(1) $\frac{16}{40}$, or $\frac{2}{5}$ of a yojana; (2) $\frac{160}{40}$, or $2\frac{1}{2}$ times the value of some yojana; or (3) a general statement that the Buddhists divided a yojana into sixteenths. Which of these three is the correct interpretation is at present doubtful.

The scale of lineal measure alleged[2] to have been taught Gautama in his childhood makes the yojana of the same value as Yuan Chwang's, if the breadth of a finger was the same in each. The yojana is divided into 4, and not into 8 krośa as in the pilgrim's table. The quarter of this yojana, that is, a double krośa, is spoken of as the krośa of the Magadha country. If we assume that in the Magadha country there were 8 of these double krośa to the yojana, for the Hindu books usually divide a yojana into 8 krośa, the distance from the Yaṣṭivana to New Rājagṛha would equal 6 Magadha krośa, $\frac{3}{4}$ of a yojana or 12 miles. Elsewhere, as the krośa was a double one, the distance of 6 Magadha krośa could be spoken of as $1\frac{1}{2}$ yojanas, or 60 li. By increasing the 60 li by $\frac{1}{3}$ we get 80 li for the distance from Rājagṛha to Yaṣṭivana. It is probable, therefore, that the scale taught Gautama was in accordance with the value of the *old* yojana of which I have spoken, and of which Yuan Chwang's yojana was $\frac{3}{4}$ of the value.

The arrow-well at Kapilavastu, it may be noted in passing, is here spoken of as at a much greater distance (10 krośa) from the city than the position given for it by the Chinese pilgrims. I think it probable that the unknown author of this version of the Lalita Vistara, who was not unlikely

[1] Stein: *Notes on an Archæological Tour in South Bihar and Hazaribagh*, p. 8. Reprinted from the *Indian Antiquary*, 1901, vol. xxx, pp. 54 ff. and 81 ff.
[2] *Lalita Vistara* (Calc. ed.), pp. 208, 212.

a native of Magadha from the account he gives of the krośa, has taken the 10 krośa from some writer without making certain of the value of the distance he has copied. He leads us to suppose that the 10 krośa to the arrow-well were of the measure of the Magadha country, which would make the distance several times greater than the 30 li given by Fa-hian and Yuan Chwang. I quote my authority later on to show that the local krośa near Kapilavastu was probably ·661 of an English mile. Ten local krośa would equal 6·61 miles. One and a quarter yojanas, or 10 krośa, of Yuan Chwang also equal 6·61 miles. This correspondence leads me to suppose that the arrow-well was 50 li in common reckoning from Kapilavastu city, which would equal 37·5 li of the old measure. Afterwards I discuss the probability of the accuracy of the 30 li recorded by Yuan Chwang, when estimating the value of Fa-hian's yojana.

It must not be assumed that all yojanas mentioned in Buddhist literature are sacred yojanas of the value of the old yojana, that of common reckoning, or of 100 li of the latter measure. This is clear from a glance at the list of distances in yojanas between certain places given by Professor Rhys Davids.[1] The distances are taken from the Jātakas, etc.

I have just referred to the distance from Rājagṛha to Śrāvastī city as being 45 yojanas. This number of yojanas is confirmed, as the table shows, by the Jātakas, Bigandet, and Hardy.

It is beyond doubt known that the city of Kapilavastu lay a long way to the south-east of the city of Śrāvastī, and yet the Jātakas and Hardy[2] state the distance from Rājagṛha to Kapilavastu as 60 *yojanas*, while in Rockhill's *Life of the Buddha*[3] the distance is given as 60 *leagues*.

In Buddhist literature it is probable that there were several yojanas of different values employed. The solution of their relative values has yet to be found.

[1] Numismata Orientalia, *Ancient Coins of Ceylon*, p. 16.
[2] p. 205.
[3] p. 52, note 1.

I believe that the texts, from which the table of distances given by the Professor has been compiled, require to be re-examined, with a view to ascertain if the distances are to 'countries' or to 'capitals,' a very important distinction to which I allude in the course of this paper.

When the Rājagṛha merchant went to Śrāvastī, or Anāthapiṇḍika paid a visit to Rājagṛha, as each frequently did, "it was the practice for one to go and meet the other at a distance of 16 miles," [1] or one yojana from each other's city. Similarly, when Buddha paid his well-known visit to Kapilavastu, his father, Śuddhodhana-rāja, "proceeded [2] 40 li beyond the city and there drew up his chariot to await his arrival."

Yuan Chwang here seems to refer to the practice of going out some way from a city to meet people of distinction. The custom is still kept up in India. It should be noted that he has indicated the distance of one yojana by 40 li.

The Thibetans "got their first knowledge of medicine and mathematics (arithmetic) from China." [3] The introduction of the sciences into Thibet was perhaps due to the influence, and subsequent to the marriage between the years 639 and 641 A.D., of the Buddhist Princess Wench'eng of the T'ang dynasty with King Sroñ Tsan Gampo. Their accounts say that 12 yojanas was the distance from Kapilavastu city to the Anomā river.[4] As we have seen that 480 li is the Chinese record of the distance, the yojana is found to contain 40 li, if the two sides of the equation are of the same value, as seems probable from what I have stated.

Before attempting to estimate the value of the yojana of Yuan Chwang it is necessary to know what the equivalent of the cubit of his scale is likely to be.

All lineal measures are derived from the same common original, the natural cubit, or forearm, of 18·25 English inches, which was the Jewish civil cubit of five palms, or

[1] Hardy, p. 222.
[2] Beal, ii, p. 22.
[3] Rockhill, p. 211.
[4] Rockhill, p. 25.

20 finger-breadths. By adding to the natural cubit one palm, or 4 fingers, was derived the Royal Babylonian, the Jewish sacred, and the Macedonian cubit of 24 fingers, or 6 palms, measuring 21·9 English inches. From the Babylonian cubit of 21·9 inches, of which $\frac{24}{27}$ was taken, was derived the common Babylonian, the Arabian, the Persian, the Indian, and the Chinese cubit of 24 fingers, equal to 19·5 English inches. The cubit of 19·5 inches, of which $\frac{24}{27}$ was taken, became the basis of the Roman measure of 17·4 English inches.[1]

Yuan Chwang's yojana of common reckoning, calculated on the basis of the cubit of 21·9 inches, is equal to 21·9 inches × 4 × 500 × 8, or 5·530 + English miles of 1760 yards, and on the basis of the cubit of 19·5 English inches is equal to 4·9238 + miles.

The cubit of 19·5 inches was probably introduced into China a long time after the pilgrim lived.

The terms *rati, māṣa, tolā*—finger, span, cubit—*giraha, gaz̲*, etc.—in fact, all of the subdivisional terms in measures of all kinds, are conventional, or without a fixed value attaching to any one of them, except for the time being, according to the decree of the sovereign. The *li* is a typical example.

Noel,[2] writing in 1710 A.D. on the authority of a great Chinese dictionary, states that the 'ancient' li was in value 300 paces of the li of 360 paces then in use, and in the same dictionary found it stated that 125 ancient li were equivalent to 100 modern li, and that according to some authorities the ancient li consisted of 360 paces.

Here we have a record of variations in the length of the li culminating in the li of 360 paces of 1710 A.D. As it is stated that 125 ancient were equivalent to 100 modern li, this must mean that the li of 360 paces had at some time

[1] See Jervis, p. 329. Captain T. B. Jervis wrote his *Essay on the Primitive Universal Standard of Weights and Measures* in 1835, and the *Metrological and Monetary Standards throughout India*, or *Weights, Measures, and Coins*, in 1836. At pp. 5–9 the former gives the proof of the patriarchal cubit of 21·9 inches, afterwards referred to. The references in this paper are to the later work.

[2] Jervis, p. 325.

been preceded by a li of 288 paces, because $288 \times 125 = 360 \times 100$ paces. It is, moreover, mentioned that the ancient li, according to some authorities, had been divided into 360 paces. This not improbably indicates that the li of 288 or 300 paces had been increased from a li of the value of 240 or 250 paces respectively.

The li, or Chinese *mile*, of 360 paces has varied in length from 1,158 to 1,894 English feet.[1]

Taking the lowest of these figures, 1,158 feet, 240 paces, or $\frac{2}{3}$, gives a yojana of 5·85 + English miles; 250 paces or $\frac{25}{36}$, 6·092 + miles; 288 paces, or $\frac{4}{5}$, 7·0182 + miles; and 300 paces, or $\frac{5}{6}$, 7·310 + miles.

Terrien de Lacouperie, from his measurements of old Chinese money, writes[2] that "the numismatic concurs with other archæological and traditional evidence to demonstrate that the ancient standard of length measure in China was the great span or *tch'ih* of 10·63 inches. Fractions of it, namely, the three-quarters and two-thirds, in round numbers 8 and 7 inches, were used as units during the waning periods of the Tchou dynasty for special purposes; while the coin evidence of its half, quarter, fifth, sixth, and tenth shows its entirety as the standard." He also mentions that there was a Chinese tch'ih of 20·63 inches, or 270 mm.

In Far Eastern measures of length a 'span' is equal to 12 fingers, and is therefore the half of a cubit, which is always divided into 24 *fingers*, no matter what its length may be. The tch'ih of 10·63 English inches, or 12 fingers, would thus be half of a cubit of 21·26 inches. The tch'ih of 20·63 inches must have been a *double* span or cubit of 24 fingers.

Here we have definite and trustworthy evidence that shortly before Yuan Chwang (599–664 A.D.) started for India there were cubits of 20·63 and 21·26 English inches in use in China. Deducing the length of the pilgrim's yojana from these we find that the cubit of 21·26 inches

[1] Wells Williams: *Dictionary of the Chinese Language.*

[2] *Introduction*, British Museum Catalogue, *Chinese Coins*, para. viii, p. xlv.

gives a yojana of 5·36$\hat{8}$ English miles, and the cubit of 20·63 inches gives a yojana of 5·209 + miles, according to the subdivisions of his table.

It is clear from the coin evidence that the oldest measures of length in China were founded originally on the *patriarchal* cubit of 21·9 inches, and that the cubit had gradually become shortened to 21·26 and 20·63 English inches in different parts of China.

All measures of length and weight, after a time, tend to become less in the hands of the people.

From what has been stated with respect to the length of the patriarchal cubit, it is to be observed that the yojana of Yuan Chwang could not have exceeded 5·530 English miles (cubit = 21·9 inches), and, on the other hand, his yojana could not have been less than 4·92$\hat{4}$ English miles (cubit = 19·5 inches).

If we take the yojana adopted by Yuan Chwang in his *Records* to have been midway between the yojana of 5·36$\hat{8}$ and 5·209 English miles, that is, as having been equal to 5·288 miles, I am firmly of the opinion that we cannot be more than a very few yards wrong for short distances.

Of course, it is necessary to divide by 40 to convert the number of li given into yojanas.

Taking, then, 5·288 English miles as the equivalent of the *yojana of common reckoning* in the different countries in India when Yuan Chwang visited them, we may conclude that the *old* yojana, of which Yuan Chwang's was $\frac{3}{4}$, was of the value of 7·050 English miles approximately.

If we had been given by Yuan Chwang the different measures he mentions in his *Records* in Chinese nomenclature instead of Indian equivalents, they would have been as follows:—

Value in English scale.	Ts'un, or finger.	Tch'ih, or palm.	Chih, or foot.	Che tchi, Chih, or cubit.	Chang, Tchang.	Puu, or pace.	Tchang, or Chan.	Li, or mile.	Yojana.
Inches.									
·87252	1								
3·49008	4	1							
8·72520	10	...	1						
20·94048	24	...	...	1					
34·90080	40	10	...	...	1				
52·35120	60	...	...	...	...	1			
69·80160	80	...	...	...	...	$1\frac{1}{3}$			
87·2520	100	...	...	...	...	...	1		
Miles.									
·1322	9600	2400	960	400	240	160	96	1	
5·288	384,000	96,000	38,400	16,000	9,600	6,400	3,840	40	1

The following are the data from which this table has been constructed. The foot, pace, and li of Yuan Chwang are discussed along with the measures of Fa-hian.

Yuan Chwang tells us that his yojana was divided into 40 li and 384,000 fingers.

We are informed by Terrien de Lacouperie[1] that 10 tch'ih are a tchang.

The original value of the tch'ih I take to have been 'palm,' or 4 finger-breadths, and not always 'span,' as it is sometimes translated, because, in the "Family Sayings of Confucius" (fourth century B.C.) it is recorded "*spread* out your finger, and you know a ts'un, or inch; *spread* out your hand, and you know a tch'ih or *span*."[2]

Here 'spread' evidently has the meaning of 'put out,' as it is impossible to spread out, or increase in breadth,

[1] *Chinese Coins*, p. xliv, note 6. A tchang = 10 tch'ih = 80 fingers is used by Confucius to record the stature of certain relatives and other persons.

[2] *Chinese Coins*, p. xliv, note 3.

a *single* finger. As the Chinese character for *spread* is in both instances the same, I infer that the tch'ih here meant is a *palm*, or 4 fingers put out and touching one another, and not 'span.' [1]

Thus, in old times, the palm in China was of four fingers, in this agreeing with what is known to be still the case in Eastern countries.

The tch'ih measure has had different values at various times in Chinese history, according to the context. These appear to have been multiples of the palm. We have seen that a tch'ih may be a palm or 4 fingers, and at other times half a cubit, or span, equal to 12 fingers, and again, a double span of 24 fingers. Confucius was 9·6 tch'ih in height. Here tch'ih is exactly 8 fingers. In accordance with the scale of Yuan Chwang, Confucius measured 5·58 feet. The maximum height of a Chinaman at the present time is 5·72 feet.

During the sway of the Tchou dynasty there was a tch'ih in use actually equal to 8 fingers.[2]

In Indian lineal measures there are usually 8 barleycorns to the finger. It will have been noticed that Yuan Chwang divides the finger of his scale into 7 barleycorns. I was inclined to believe at one time, because Jervis only mentions a Chinese cubit of 19·5 inches, that, somehow, the number 7 might affect the length of the pilgrim's cubit, and make it 19·1625 inches, or $\frac{7}{8}$ of the patriarchal cubit of 21·9 inches. A cubit of 19·1625 would make Yuan Chwang's yojana only 4·8390 English miles. This is much too short.

I have the consent of Jervis for disregarding the division of the finger into 7 barleycorns in Indian measures. He states: "The fanciful account of the three different systems of lineal measure, founded on the number of barleycorns, 6, 7, and 8, laid breadthwise, has *no* real existence in practice,

[1] The late Mr. T. Watters, of our Society, was kind enough to hunt up this passage in the "book from which Lacouperie translated," and on June 8th, 1900, replied that the Chinese character for 'spread out' was in both places the same.

[2] Jervis, p. 325; *Chinese Coins*, para. 6, p. xliv.

though it helps us to understand the identity of the Indian and foreign measures." [1]

The tchang or chan of Yuan Chwang, like that of Fa-hian, seems to have been of the value of 100 fingers; this figure cannot be checked for the former pilgrim.

It is of importance to recollect that the patriarchal cubit, the longest known at any time, was 21·9 inches, and that at its highest estimate the cubit of Yuan Chwang could not have exceeded this figure. I draw attention to this limit particularly, because General Cunningham has throughout his writings taken the yojana of Yuan Chwang as equal to 6·75 English miles. This is clearly an over-estimate. There are 63,360 inches in the English mile, and in 6·75 miles there are 427,680 inches. As Yuan Chwang's yojana, on his own showing, contains only 384,000 fingers, there must be in it 16,000 cubits, because he states that there are, as we all know, 24 fingers in a cubit. Dividing 427,680 inches, the equivalent of 6·75 miles, or General Cunningham's estimate of Yuan Chwang's yojana, by 16,000 cubits, the number in Yuan Chwang's yojana, we get for answer a cubit of 26·73 English inches as the value of General Cunningham's cubit, if his estimate of 6·75 miles were correct. For the reason that a cubit of 26·73 inches, and divided into 24 fingers, does not exist, and has never at any time been known in the measures of antiquity, it is demonstrated that the General's estimate of 6·75 miles to the yojana of Yuan Chwang is overstated very considerably.

We have a fair approximation to my estimate of 20·94 inches for Yuan Chwang's cubit in the Royal cubit of Memphis, found also in Babylon, and Chaldea, which is by some writers considered equal to 20·67 English inches.[2]

General Cunningham's estimates of the yojanas of Fa-hian and Yuan Chwang are open to objection from another point of view. He based his calculations of the length of their yojanas on the "distances between well-known places."

[1] Jervis, p. 271.
[2] Chambers: *Encyclopædia*, 1892, *Weights and Measures*.

When you come to read carefully what the pilgrims actually say regarding these distances you almost invariably find that the measurement given is from a *capital* town to a '*country*.' The closing sentence in the description of a country by Yuan Chwang is like this:—"From this going (direction is here given) —— li we come to the *country* (kingdom) of ——." General Cunningham and other writers on the travels of the Chinese pilgrims nearly always assume that the measurement is *to* the *capital* of the country next described. I doubt very much if 'capital' and 'country' are synonymous, and in fact believe that 'country,' on the contrary, should be taken to be synonymous with "*border* of the country of ——," in the closing paragraph. The capital was, probably in most instances, some way from the border of the same kingdom, and was, perhaps, only on the border of the country occasionally, as when the kingdom was bounded by a river, and the capital was on its banks.

The assumption that 'country' and 'capital' are synonymous is, I am confident, one of the causes of error in the correct identification of ancient sites. It has led General Cunningham to believe that the yojana of the *Records* was not always a constant measure in lineal direction, and to make him suspect that occasionally the yojana varied with the krośa, or other measure in use in particular countries, as, for example, in the kingdoms of Piloshanna and Kapiṭha.[1] It possibly, too, has led to the conclusion that, sometimes, the distances stated by the pilgrims are corrupt.

General Cunningham's belief that his measurements for the value of the yojana of either pilgrim were between well-known places must have been erroneous if 'country' means '*border of country*.' The actual point to which the border of any country extended must usually be unknown. We merely can guess at the truth. In many instances, the borders of a country were determined by big rivers, and for this reason it seems probable that the distances stated

[1] *Anc. Geog. India*, p. 367.

by Yuan Chwang are frequently to rivers, or other natural features of a country, and not to the capital.

If my opinion be correct that 'country' probably always means 'border of the country,' then Yuan Chwang, or his biographer, only in a very few instances, tells us how far it was from the border of a kingdom to the capital.

That Yuan Chwang, as might be expected from so close an observer, carefully distinguishes between the use of the words '*country*' and '*capital*,' and that by '*country*' he means '*border*' of country and not capital, I will proceed to prove.

My chief reason for believing that country means border of country is that the yojana of Yuan Chwang is too short to cover the distance from capital to capital of neighbouring kingdoms. The discrepancies in the following paragraphs containing the distances from the capital of Piloshanna to the sacred ladders, 20 li east of the capital of Kapiṭha, seem to me capable of solution only on the hypothesis that by country is meant border of country. The paragraphs to which I refer are the following:—

I. *Records.* "In the middle of the chief city [of the Piloshanna country] is an old *saṅghârâma* . . . . By the side of it are the traces where the four former Buddhas sat and walked in exercise."

"Going hence south-east 200 *li* or so, we come to the country of Kie-pi-tha (Kapitha)."

"To the east of the city [that is, capital of Kapiṭha] 20 *li* or so is a great *saṅghârâma* . . . . Within the great enclosure of the *saṅghârâma* there are three precious ladders . . . ."[1]

II. *Life.* "Again going east 200 *li* or so [that is, as we see from the *Records*, the measurement is taken from the capital city of Piloshanna] we come to the country of *Kie-pi-tha* (Kapitha)."

"About twenty *li* to the east of the city [capital of

[1] Beal, i, pp. 201, 202.

Kapiṭha] there is a *saṅghârâma*, within the courts of which there are three ladders . . ."[1]

III. *Life.* "Once more he paid adoration to the sacred traces of the heavenly ladder, and then proceeding north-west *three* yojanas he came to the *capital* of the country of Pi-lo-na-na (Vîrashana)."[1]

Piloshanna and Pilonana are different renderings of the name of the same country, (?) Vīrasana.

In the *Records* and in the *Life* the distances 200 li and 20 li are the same, so that they may be taken without doubt as correct. If country and capital are synonymous, then the distance from the capital of Piloshanna to the ladders in the Kapiṭha country was 220 li, or $5\frac{1}{2}$ yojanas. The second passage in the *Life*, on the other hand, makes the distance between the same points only 3 yojanas. This number of yojanas is probably correct, otherwise it would be difficult to account for the omission of the $\frac{1}{2}$ yojana, if 3 yojanas be a mistake for another whole number. Three yojanas might be a mistranslation of 4 or 5 yojanas, but I should think the distance could not very well be an error for $5\frac{1}{2}$ yojanas.

Seeing that both the distances, $5\frac{1}{2}$ yojanas and 3 yojanas, are in all likelihood correct, the solution of the apparent discrepancy can be found by combining in part the two distances, making the total distance 8 yojanas from the capital of the Piloshanna country to the sacred ladders east of the city of Kapiṭha. This solution, if correct, makes the distance, (1) from the capital of the Piloshanna country to the border-line between the Piloshanna and Kapiṭha countries 200 li, as in the texts; (2) from the border-line between these two kingdoms to the capital of Kapiṭha, 100 li; and (3) from the chief town of Kapiṭha to the ladders, 20 li, as stated both in the *Records* and in the *Life*.

By combining in full the two last distances of 100 li and 20 li, I believe we have the explanation of the statement of the 3 yojanas.

[1] Beal: *Life of Hiuen Tsiang*, pp. 81, 190.

The solution I have given of the discrepancies between the statement in the *Life* and that in the *Records*, supposes an error in the text of the biographer of Yuan Chwang in the statement that the distance of 3 yojanas was to the '*capital*' of the Piloshanna country, instead of to the 'country.'

In the abbreviated accounts in the *Life* there is often no distinction between 'country' and 'capital.' It is frequently necessary to compare records in the two texts to understand whether those of the *Life* refer to the country as a whole, or only to the capital of the country, and occasionally both 'capital' and 'country' are omitted altogether. Sometimes 'capital' is wanting in the text, and at other times 'country.'

Apparent contradictions in the statements of distance or of bearing in the *Life* and *Records* are some of them capable of explanation by understanding *border* of country for *country*. This accounts for the *Records* giving "south-east" and the *Life* "east" *to* the country of Kapiṭha.

General Cunningham quotes the distances just discussed as an instance in which he conjectured that the value of the yojana of Yuan Chwang sometimes depended on local variations in the length of the krośa. He, however, has altogether omitted to take into account the statement of the 3 yojanas.[1]

For another example of the distinction between 'capital' and 'country' the distance from Śrāvastī to Kapilavastu is afterwards given.

Now that I have shown that General Cunningham's estimate of the value of Yuan Chwang's yojana is unreliable from two points of view, it is necessary to bring forward proof in support of my own estimate of 5·288 miles.

I confess I find it somewhat difficult to do this, because there are so few really fixed points between which we know the distances from Yuan Chwang's narrative. There are

[1] *Anc. Geog. India*, p. 367. *Archæological Survey Reports*, i, p. 270; ix, p. 15.

some places between which the distances are known, but as the identifications of them are not free from doubt, the distances cannot be made use of for my purpose.

I adduce the following in proof of Yuan Chwang's yojana of 5·288 English miles:—

(1) One satisfactory piece of evidence, which I can recall, is contained in a paragraph in an Indian newspaper, recording some observations of Colonel Deane in the Udayāna country, of which a preliminary notice at the time appeared in the proceedings of the Imperial Academy of Vienna from the pen of the late Professor Bühler. The words which follow are taken from the newspaper notice:—[1] "The Chinese pilgrim narrates that he had seen *about* 30 *li* on the north side of the Swat river, and to the S.W. of the lake of the Naga Apalala, a miraculous foot-trace of Buddha on a great rock. . . . . The stone bearing the footprints lies a few yards from a small ruined mound, known as Mulamai Devi, which is situated on the hillside above Tirat. The distance to the Swat river, which flows in a great bend to the south of the village, is *about four miles*. . . . ."

From this account the yojana of Yuan Chwang is found to be 5·3 English miles, which agrees with my estimate of 5·288 miles. I am not aware if the distance from the footprints to the Swāt river has been accurately measured since they were discovered by Colonel Deane.

Dr. M. A. Stein has recently described some important identifications of ancient sites in the Magadha kingdom. From his article I take the following details very much in his own words:—

(2) At a distance of "about $\frac{3}{4}$ of a mile" south-east of Jeṣṭiban (which he identifies as a "small undulating plateau," at the west foot of the hill, which is the last

[1] *Pioneer*, April 14, 1898.

offshoot of the Haṇḍia range, about ¾ of a mile to the east of Jeṭhian village), there is a gap in the main hill range called Saffī Ghāṭ. Proceeding south-east from Jeṣṭiban, and flanking the approach to Saffī Ghāṭ on the west, a spur is seen to descend on which is situated a modern temple called Sahudrasthān. The site of this temple corresponds to "the *stūpa* which stood 6 or 7 li (i.e. about 1¼ miles) to the south-east of Yashṭivana."[1]

At 5·288 miles to the yojana, the distance 6 li equals ·7932 of a mile, and 7 li ·9254 of a mile. This is a much nearer approach to "about ¾ of a mile" than 1¼ miles, which Dr. Stein writes as the value of 6 or 7 li. The identification of Sahudrasthān with the site of the *stūpa*, he says, "cannot reasonably be doubted."

(3) Yuan Chwang then mentions a "solitary hill" 3 or 4 li to the north of the Sahudrasthān stūpa. Here the Ṛiṣi Vyāsa formerly lived in solitude. The hill is identified by Dr. Stein with that now called Bhaluāhī. The rocky recess on its south face, in which the Ṛiṣi is supposed to have dwelt, is known as Pansabda. The Bhaluāhī hill is north of Saffī Ghāṭ "about half a mile, which corresponds accurately enough to Hiuen Tsiang's '3 or 4 li,'" from the mountain on a transverse pass of which stood the stūpa at Sahudrasthān.[2]

At 5·288 miles to the yojana, 3 li are equal to ·3966 of a mile, and 4 li to ·5288 of a mile. The identification of the stūpa site, and of the rock dwelling of Vyāsa, would thus seem to be indisputable.

(4) To the north-east of the solitary hill "4 or 5 li," where dwelt the Ṛiṣi Vyāsa, Yuan Chwang describes another "small hill also standing alone." In this was a stone-chamber large enough to seat a thousand persons. This cavern Dr. Stein identifies with the Rājpiṇḍ cave,

[1] Stein: *Reprint*, pp. 9, 11. Beal, ii, p. 147.
[2] Stein: *Reprint*, p. 12. Beal, ii, p. 148.

situated on the north face of the Caṇḍu hill, which rises in the Haṇḍia range 1½ miles south-east from the village of Kīrī. The Caṇḍu hill is "about one mile" north-east from the "solitary hill," which terminates the Haṇḍia range opposite Saffī Ghāṭ.[1]

Four li are equal to ·5288 of a mile, and 5 li to ·661 of a mile, at 5·288 miles to the yojana. The distance from the "solitary hill" of Vyāsa to the Rājpiṇḍ cave being "about one mile," 4 or 5 li are a good way short of the actual length noted by Dr. Stein. Is it possible that the "wooden way" spoken of by Hiuen Tsiang shortened the distance from the stūpa at Sahudrasthān to the cave?

(5) Dr. Stein gives a full description of his identification of the Sobnāth Hill with the Kukkuṭapādagiri, or 'Cock's foot mountain' of the pilgrims. Hiuen Tsiang makes the distance to the hill "100 li or so," through a great wild forest, "to the east of the Mahī river." Dr. Stein says, "measuring on the map the direct distance from the Sōbnāth Hill to the bank of the Mōhana Nadī opposite Bodhgayā we find it to be close on 14 miles. This distance, with the addition of one-fourth required to compensate for the excess measurement on ordinary roads from village to village, and taking the li at its ordinary value of about ⅓ mile, brings us as near as we can expect to the 100 li of the Chinese pilgrim."[2]

The distance of 100 li at 5·288 miles to the yojana comes to 13·22 miles, which is "close on 14 miles" for the map distance. No doubt a little should be allowed for the extra distance required for the words "or so" of the pilgrim.

The map in the Arch. Surv. Reports[3] seems to show a defile in the Maher group of hills through which a course a little north of east is feasible. The map distance to the Mahī river by this way would be about 13½ miles.

[1] Stein: *Reprint*, p. 12. Beal, ii, p. 148.
[2] Stein: *Reprint*, p. 19. Beal, ii, p. 142.
[3] Vol. i, p. 2.

(6) General Cunningham's survey[1] of the new city of Rājagṛha makes the interior measurement of the walls of the inner city 13,000 feet, and the measurement outside the ditches 14,260 feet. The mean of these is 13,630 feet. Yuan Chwang says the interior walls were 20 li[2] in circuit. The pilgrim's measurement, at 5·288 miles to the yojana, gives 13,960 feet. A yojana of the value of 6·75 miles would require the circuit to measure 17,820 feet, and one of 8 miles, 21,120 feet!

(7) Behrāīc (Bahrāīch) is the only district in India, so far as my information goes, in which a krośa of the value of that of Yuan Chwang, ·661 mile, is still in use. The *Settlement Report* of this district of the year 1873[3] gives the different measures which prevail, and states that "under the hills [corresponding to the tract of country which lay between the cities Śrāvastī and Kapilavastu] another kos is in use, which does not measure more than two-thirds of a mile." If we multiply the $\frac{2}{3}$ by 8 to get the yojana, it is found to equal 5·3̇ miles.

[1] *Anc. Geog. India*, p. 467. *Arch. Surv. Rep*, i, . 23.
[2] Beal, ii, p. 165.
[3] pp. 81–85.

I now proceed to investigate the measures of

II. Fa-hian.

Value in English scale.	Ts'un, or finger.	Tch'ih, or palm.	Chih, or foot.	Che tchi, Chih. or cubit.	Chang.	Sin, or fathom.	Puu, or pace.	Tchang, Chan.	Li, or mile.	Yojana.
Inches.										
·87252	1									
3·49008	4	1								
8·72520	10	...	1							
20·94048	24	6	...	1						
34·90080	40	10	...	...	1					
52·35120	60	15	...	...	...	1				
69·80160	80	20	...	...	...	...	1			
87·2520	100	25	...	...	...	...	...	1		
Miles.										
·1322	9,600	2,400	960	400	240	160	120	96	¾	
·17626̇	12,800	3,200	1,280	533⅓	320	213⅓	160	128	1	
7·0506̇	512,000	128,000	51,200	21,333⅓	12,800	8,533⅓	6,400	5,120	40	1

The table shows the Chinese measures of Fa-hian, the yojana of Yuan Chwang, and the old yojana. The latter, we shall afterwards find, is the yojana of Fa-hian.

The old yojana is shown equal to 512,000 fingers, and its li as 12,800 fingers. The li of the yojana of common reckoning, or Yuan Chwang's yojana, appears as ¾ of this, or of the value of 9,600 fingers.

Wells Williams, in his *Dictionary of the Chinese Language*, states that the Chinese 'foot' has under different dynasties been divided into, or were of, 8, 9, and 10 ts'un (fingers). It is at present 16 fingers.

The length of the foot of Yuan Chwang and of the cubit of Fa-hian are deducible from the accounts we have of the

Aśoka pillar at the site of the heavenly ladder, near the Kapiṭha capital.

We are told by Fa-hian that over the sacred ladders in the Saṁkāśya country Aśoka built a vihāra, and that behind the vihāra the emperor erected a stone pillar "thirty cubits high."[1]

Yuan Chwang's description differs slightly. The ladders and the vihāra seem to have been renewed, or renovated, by the "neighbouring princes" after the time of Fa-hian, and before Yuan Chwang came to India. The Aśoka pillar, however, was still standing, and is stated by the pilgrim to have been "about 70 feet high."[2]

There can be no doubt that the country of Kapiṭha of Yuan Chwang is the same as that referred to by Fa-hian under the name of Saṁkāśya, and that Fa-hian and Yuan Chwang both refer to the same pillar.

From these statements of the pilgrims we learn that "thirty cubits" of Fa-hian are "*about*" equal to 70 feet of Yuan Chwang.

The cubit of Yuan Chwang we have seen was 20·94048 inches. There can be very little hesitation in believing that the cubit of Fa-hian was of exactly the same length as that of the other pilgrim, or very nearly so.

As a cubit is the measure of 24 fingers, Fa-hian's 30 cubits for the height of the pillar correspond to 720 finger-breadths. Yuan Chwang makes the height 70 feet, that is, each foot comprised 10 finger-breadths, and the height of the pillar was "*about*" 700 fingers. The inference from the comparison is that Yuan Chwang's foot-measure was the one of 10 fingers mentioned in Chinese literature, and that Fa-hian's cubit must have comprised 24 fingers, each having exactly the same value as the finger-breadth of Yuan Chwang.

Fa-hian makes the height of the pillar 628·2144 inches, and Yuan Chwang about 590·764 inches.

Buddha's religious staff was a "chang and six or seven tenths" or "16 or 17 *feet*"[3] in length.

[1] Beal, i, ch. xvii, pp. xl, xli.
[2] Beal, i, p. 203.
[3] Beal, i, chap. xiii, p. xxxv. Giles: *Record of Buddhistic Kingdoms*, p. 24.

It has been noted under the measures of Yuan Chwang that a tchang and 10 tch'ih are the same in value, so that 40 + 24 or 40 + 28 fingers, that is 64 or 68 fingers, are thus equal to a chang and six or seven tenths. The total is exactly the same as 16 or 17 feet, if each foot be multiplied by *four* fingers. At the equivalent of 4 fingers to the 'foot' the staff measured 55·84128 or 59·33136 English inches.

At the present time in India the *sāḍasā*, or *saṇasā*, of the mendicant is 34 inches or so long, and the *crosier*, or *kubaḍī*, carried by other mendicants, is about 54 inches.

The sāḍasā is an iron staff, split from the point for some way up, and adapted at the lower end for catching hold of live charcoal. The two blades of the divided part of the shaft are locked by slipping down a clasp (*cippī*) towards the *āg* to be caught. The upper end of the sāḍasā terminates in a ring 3 or 4 inches in diameter, which passes through an eye-hole in the sāḍasā of greater diameter than the thickness of the ring. The ring is thus freely movable in the eye-hole. The ring passes through the middle of 5 or 6 smaller rings, each about 2 inches across. The mendicant holds the sāḍasā by the middle and jingles the rings as he wanders through country where he may be attacked by wild animals, or produces the noise by striking the point of the staff on the ground.

The *khakkharam* of Buddha was probably of somewhat similar design to the sāḍasā. It also made a noise when shaken.[1]

The crosier is made of iron about $\frac{1}{3}$ of an inch in thickness throughout. At its lower end it is frequently bulbous. The free end of the crooked part sometimes has one or more rings, after the style of the sāḍasā. When a mendicant halts he fixes his crosier in the ground upright in front of himself, but at a short distance away.

The staff of Buddha not improbably was nearly of the same length as the Indian crosier, or kubaḍī, of the twentieth

[1] Beal, i, p. 96, note 51. I have not had an opportunity to consult the references noted.

century. This is confirmed by I-Tsing,[1] who, speaking of what he himself saw, records that "the metal staff is in Sanskrit 'khakkara,' representing the sound (produced by the staff, when carried in walking). . . . . The stick itself is made of wood, either rough or smooth, its length reaching to a man's eyebrows. . . . ."

There can be no doubt, I think, that the chang mentioned by Fa-hian in the measurement of Buddha's religious staff is the chang equal to 10 tch'ih, each of 4 fingers. The measurement given of 16 or 17 *feet* is evidently an error for 16 or 17 tch'ih or 'palms,' which have become 16 or 17 chih or 'feet.' That Fa-hian's foot was of 4 *fingers* only, is contrary to what we know of the old Chinese measure of a foot, which was of the value of 8, 9, or 10 fingers.

The chang just spoken of must be carefully distinguished from another chang mentioned by Fa-hian. He gives the height of the Kaniṣka stūpa at Peshāwur as equal to "40 chang."[2] Yuan Chwang informs us that this same stūpa was "400 feet" high.[3] As we now know that Hiuen Tsiang's foot contained 10 fingers, the height of the stūpa must have been 4,000 fingers. The equation now stands 40 chang equal 4,000 fingers, or 1 chang is equal to 100 fingers. The value of this chang is exactly $2\frac{1}{2}$ times the value of the other chang of 10 tch'ih. The equation is correct, because a chang, tchang, or chan of the value of 100 fingers is mentioned by one writer.[4] This chang seems always to have been of 100 fingers.

The equation is of interest in confirming the value of the foot of Yuan Chwang, which I have already demonstrated as being equal to 10 fingers.

The height of the Kaniṣka stūpa at Peshāwur, we observe, was 40 chang of Fa-hian, or 400 feet, equal to a total of 4,000 fingers of Yuan Chwang, or 290·84 English feet. It

[1] Takakusu: *Record of the Buddhist Religion*, p. 191.
[2] Beal, i, chap. xxii, p. xxxii.
[3] Beal, i, p. 100.
[4] Jervis, p. 324.

is described by Fa-hian as the highest stūpa in India in his time. Its circumference at the base was, according to Yuan Chwang, 1½ li, that is ·1983 of an English mile, or about 350 yards, the yojana being taken as 5·288 miles.

The vihāra, situated 70 paces of Fa-hian to the north of the eastern gate of the Jetavana, south of Śrāvastī, where Buddha held a discussion with the followers of the heretical schools, was, Fa-hian says, "more than six chang (70 feet) high." [1] Yuan Chwang gives the height of this vihāra as "about 60 feet high." [2]

Here, again, a chang is 100 fingers, and a foot 10 fingers.

The foot of the scale of Fa-hian seems to have been of 10 fingers, and of exactly the same value as the foot of the other pilgrim.

This appears to be so from the following passages describing an Aśoka pillar, which was situated 3 li of Fa-hian to the south of the ancient city of Pāṭaliputra. I transcribe the descriptions of Fa-hian (I, II), and of Yuan Chwang (III).

I. "To the south of the tower is a stone pillar about a *chang* and a half in girth (18 feet), and three *chang* or so in height (35 feet). On the surface of this pillar is an inscription to the following effect: 'King Aśôka presented the whole of Jambudvîpa to the priests of the four quarters, and redeemed it again with money, and this he did three times.'" [3]

II. "To the south of the pagoda there is a stone pillar fourteen or fifteen feet in circumference, and thirty odd feet in height. On it . . . ." [4]

III. "By the side of the *vihāra* which contains the traces of Buddha, and not far from it, is a great stone pillar about thirty feet high, with a mutilated inscription on it." [5]

[1] Beal, i, p. xlvii.
[2] Beal, ii, p. 10.
[3] Beal, i, p. lvii.
[4] Giles, p. 66.
[5] Beal, ii, p. 91.

[Then follows a description much the same as in the first quotation.]

Here "about 30 feet high" of Yuan Chwang's description are of the value of "thirty odd feet" or "three chang or so" of Fa-hian. Because there are 10 fingers in the foot-measure of Yuan Chwang, there are 300 in 30 feet. We have also seen that 3 chang are equal to 300 fingers, each chang being 100 fingers. If in the second quotation the words "thirty odd feet" are a *literal* translation of the text used, and are not a translation of *three chang*, it is evident that there are 10 fingers in the foot of Fa-hian.

The height of the pillar was 21·813 English feet.

With regard to the value of the *sin*, or fathom, I have very little to say. As far as I am aware, there are no parallel passages in the texts of the pilgrims concerning the measure.

In China a fathom seems to have been always a measure of 6 feet. Its present value is 96 fingers, because there are 16 fingers in the foot. But as formerly a foot was of 8, 9, or 10 fingers, a fathom must have been of the value of 48, 54, or 60 fingers only, at different times.

The fathom of Fa-hian and Yuan Chwang probably was of 60 finger-breadths, because there were 10 fingers in the foot-measure of each pilgrim. Its value was 52·3512 English inches.

I have come to the conclusion that Fa-hian made use of the old yojana in stating distances. This is not an easy matter to prove, but I will now attempt to solve the problem.

To arrive at an estimate of the value of the yojana of Fa-hian I shall examine the statements of the Chinese pilgrims relating to the distance from the city of Śrāvastī to the city of Kapilavastu.

In the *Life* and *Records* of Yuan Chwang the distance to Kapilavastu is reckoned from the town in which Kāśyapa Buddha was born, which was situated to the north-west or west of Śrāvastī. Fa-hian calls this town Towai, and reckons the distance to Kapilavastu city from the city of Śrāvastī and not from Towai.

In the *Records* the distance of Towai from Śrāvastī is given as "16 li or so,"[1] and in the *Life* as "sixty li or so,"[2] while Fa-hian makes the distance "50 li."[3]

All these statements differ. The 16 li may be an error for 60 li, but on the other hand we have seen that a Buddhist yojana was divided into 16 li, and it is not improbable that Yuan Chwang had originally in his notes the statement that Towai was distant from Śrāvastī city about "16 li, or one old yojana," and that by an oversight the distance of 16 li was not changed into the figures representing the distance in li of the measure of common reckoning.

If this be the correct meaning of "16 li or so," this distance actually corresponds to $53\frac{1}{3}$ li in common reckoning, the 16 li equalling one old yojana.

I believe, therefore, that the distance of 60 li or so given in the *Life* is the correct distance in round numbers.

Assuming that Fa-hian's 50 li is a record in the old measure, this distance would be equal to 66·6 li in common reckoning, the measure which was adopted by Yuan Chwang.

I will now discuss the other distances given by Yuan Chwang and his biographer.

In the *Life*[4] we are informed that "From this [that is, from Towai] going south-east about 800 *li* we come to the *kingdom* of Kapilavastu."

It is tolerably certain that we have in this record another error similar to the one in the *Life* already pointed out by me in this paper in connection with the distances between the capitals of Piloshanna and Kapiṭha, namely, that instead of *kingdom* we should read *capital*, because in the *Records* the distance from Towai to the *kingdom* of Kapilavastu is given as "500 li or so."[5]

I should, therefore, infer that the distances from Towai to Kapilavastu city were as follows, in the measure of common reckoning, according to Yuan Chwang:—

[1] Beal, ii, p. 13.
[2] Beal: *Life*, p. 94.
[3] Beal, i, p. xlviii.
[4] Beal: *Life*, p. 94.
[5] Beal, ii, p. 13.

(1) From Towai to Śrāvastī city 60 li or so.
(2) From Śrāvastī city to the *border* of the Kapila kingdom 500 li or so.
(3) From the Kapila border to Kapilavastu city 240 li or so.

It will be noticed that I accept as correct the observation of the *Life* that the distance from Towai to Kapilavastu city was 800 li, after correcting *kingdom* to *city*. Both Mr. Vincent Smith[1] and General Cunningham,[2] in discussing the distance between the cities Śrāvastī and Kapilavastu, have ignored the 800 li statement.

Seeing that Towai was 60 li from Śrāvastī, the distance between the cities Śrāvastī and Kapilavastu, according to the *Life*, amounts to 800 li less 60 li, or 740 li, in the measure of common reckoning, that is, 18·5 yojanas. Converting this distance into the old measure, 18·5 yojanas are equal to 13·875 yojanas. If we deduct 1·875 yojanas from this we get 12 yojanas for the distance Fa-hian gives between Śrāvastī and Napika, and the balance, 1·875 yojanas, as the equivalent in old reckoning for the distance from Napika to Kapilavastu, if the old yojana and the yojana of Fa-hian are one and the same measure.

The distance between the two capitals, 740 li, at 5·288 miles to the common yojana, was 97·828 English miles. It is impossible, therefore, that Saheṭ Maheṭ can be Śrāvastī, as it agrees neither in distance nor bearing from Kapilavastu, the position of which is known from recent discoveries.

As the city of Śrāvastī is here ascertained to have been situated about 98 miles from Kapilavastu, and as it is known to have lain on the Aciravatī (Rāptī) river,[3] the bearing from Śrāvastī city to that of Kapilavastu must have been south-east, whereas Saheṭ Maheṭ is between 50 and 60 miles a little south of west from the Kapilavastu remains.

Mr. Vincent Smith has devoted two of his admirable articles[4] to the identification of the position of Śrāvastī,

[1] J.R.A.S., July, 1898, p. 526.
[2] *Anc. Geog. India*, p. 414.
[3] Oldenberg: *Buddha*, p. 168.
[4] J.R.A.S., July, 1898, p. 527; January, 1900, p. 1.

and has come to the conclusion, also, that the site of Saheṭ Maheṭ and of Śrāvastī are not identical, as General Cunningham and other writers have believed. Notwithstanding that I think that Mr. Smith has erred on two points, namely, in taking 500 li as the distance between the cities Śrāvastī and Kapilavastu, and in considering that 'country' and 'capital' are convertible terms; and although I cannot satisfy myself that the values he assigns to the yojanas adopted by the Chinese pilgrims are near the truth, either in this instance or in the identification of other Buddhist sites published at different times by him, the result is that our independent evidence for the bearing from Śrāvastī city to Kapilavastu city is the same, and our distances are approximately so, too, he making the distance 83⅓ to 90 miles, or in a more recent publication[1] 90 to 100 miles, and I 98 miles. I believe, however, that he has correctly located the approximate position of Śrāvastī city. It is incredible that King Prasenajita and his queen, when fugitives from the city of Śrāvastī, could have taken 7 days and 7 nights, and a messenger 3 days,[2] to cover the distance from Saheṭ Maheṭ to Kapilavastu city.

"Leaving the city of Śrāvastī and going 12 yojanas to the south-east,"[3] Fa-hian arrived at a town called Napika, or Napeikeā, where Krakucanda Buddha was born. Going "north" from Napika "less than one yojana," he arrived at the town which was the birthplace of Kanakamuni Buddha, from which Kapilavastu city lay "less than a yojana" eastward.[4]

Yuan Chwang places the town of Krakucanda to the *south*[5] of Kapilavastu 50 li, and the town of Kanakamuni 30 li to the north-east of the town (Napika) of Krakucanda. His bearing for the town of Kanakamuni would take it to the south-east of Kapilavastu.

[1] *Antiquities in the Tarai, Nepāl*, Pref. Note, p. 7.
[2] J.R.A.S., 1898, p. 537.
[3] Beal, i, chap. xxi, p. xlviii.
[4] Beal, i, chaps. xxi, xxii, p. xlix.
[5] Beal, ii, pp. 18, 19.

The statements of the two travellers regarding the position of the town of Kanakamuni from Kapilavastu are thus utterly at variance with each other.

It is supposed that there is some confusion[1] in the texts of the pilgrims regarding the bearing of Napika and the town of Kanakamuni from Kapilavastu.

It is very improbable that a traveller making the direct journey from the city of Śrāvastī to the capital of Kapilavastu, as Fa-hian apparently did, had first to go to a point south-east from Kapilavastu before he could reach the city, as Yuan Chwang's statement respecting the position of the town of Kanakamuni requires. This reasoning seems to be confirmed by Fa-hian, who describes the bearing from Kanakamuni to Kapilavastu to be "eastward," and it is still further strengthened by a comparison of the bearings given by each pilgrim, after leaving Napika, if these are considered independently of the towns in connection with which they are stated. Fa-hian's "eastward" from Kanakamuni to Kapilavastu agrees with Yuan Chwang's "north-east" from Napika to Kanakamuni, and Fa-hian's "north" from Napika to Kanakamuni agrees with Yuan Chwang's "south" from Kapilavastu to Napika.

Yuan Chwang makes Napika the further of the two towns from Kapilavastu. As one town lay in a northerly direction from the other, it follows that Kanakamuni lay "north"[2] of Napika, thus leaving the last bearing from Kanakamuni "eastward" according to Fa-hian, and "north-east" according to Yuan Chwang.

I conclude from the argument that both Napika and Kanakamuni lay to the western side of Kapilavastu, and had to be passed through before reaching Kapilavastu, and that Fa-hian's bearings are correct if we read "north-east" for "eastward" in his account.

Yuan Chwang makes the distance from Napika to the city of Kanakamuni 30 li, and that from Kapilavastu to

[1] *Anc. Geog. India*, p. 414.

[2] The true bearing will probably prove to be north and some way to the east; but compare Laidlay's translation, given in Arch. Surv. Reports, xii, p. 178.

Napika 50 li. We should, perhaps, understand that 50 li is the reckoning from Kanakamuni to Kapilavastu. This seems to be corroborated by his statement that "to the north-east of the city 40 *li* is a *stûpa*,"[1] where a ploughing festival had been held. This statement immediately follows references to Kanakamuni's town, and the distance, 40 li, apparently is taken from that city.

Fa-hian says the ploughing festival took place to the north-east of Kapilavastu, at a few li from that city.

Whether the distances of 50 li and 30 li are correct can be considered doubtful for another reason. The sum of Yuan Chwang's two distances, from Kapilavastu to Napika and from the latter to Kanakamuni, is 80 li, or two yojanas, a distance which almost coincides with the words of Fa-hian, that the whole journey was *less* than two yojanas. Fa-hian's duplication of the words "less than a (one) yojana" would seem to indicate that the distances between the three cities were nearly equal, and that each was almost a full yojana from the other. It is possible, therefore, that Yuan Chwang's 30 li should be the same as the other distance, 50 li. In this case the distance from Napika to Kapilavastu would be 100 li in common reckoning.

We are now in a position to compare the statements of distance of the two pilgrims stage by stage.

For this purpose I think it is allowable to take the distance from Śrāvastī to Towai as equal to 60 li, as it is the number midway between the two other possible distances which I have given. It is the distance recorded in the *Life*.

If we deduct 60 li from 800 li for the distance from Towai to Śrāvastī, and 80 li for that from Napika to Kapilavastu, all of which are given in the *Life* and *Records* of Yuan Chwang, we get 660 li in common reckoning as the distance from Srāvastī to Napika, against Fa-hian's 12 yojanas, or 480 li. Assuming that the li of Fa-hian is one-third more valuable than that of Yuan Chwang, then the 480 li, or 12 yojanas, of Fa-hian, would be equal to 640 li in common reckoning, or 20 li short of what Yuan

[1] Beal, ii, p. 19.

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Chwang makes the distance. The 20 li in excess given by Yuan Chwang from Śrāvastī to Napika may possibly be accounted for, as we have seen, by supposing that his distance from Napika to Kanakamuni is understated exactly this number of li.

Yuan Chwang is generally more careful in his statements of direction and distance than Fa-hian. It is therefore possible that his reckoning, 50 li and 30 li, is correct, although his bearing to Kanakamuni from Kapilavastu is wrong. On the assumption that 50 li and 30 li are accurate, it is possible to reconcile the distances from Towai to Kapilavastu given by each pilgrim. I have shown that 1·875 yojanas *old* reckoning is the probable distance from Napika to Kapilavastu according to Fa-hian. The distance 1·875 yojanas is equal to 75 li, which, when converted into common reckoning, is equal to 100 li. If Yuan Chwang's 50 li and 30 li be also considered records in the old measure, the 80 li would equal 106·6 li in common reckoning. The difference of 6·6 li was what we found to be the excess statement (50 li Fa-hian = 66·6 li common reckoning) between the recorded distances of the two pilgrims from Śrāvastī to Towai, Fa-hian making the distance 50 li and Yuan Chwang 60 li.

The value of the distances considered is seen at a glance in this table:—

	Fa-hian.			Yuan Chwang.	
	Old Yojana.	Li (o.r.).[1]	Li (c.r.).[1]	Li (o.r.).	Li (c.r.).
Towai to S'rāvastī	...	50	66·6	...	60
S'rāvastī to Napika	12	480	640·0	...	633·4[2]
Napika to Kapilavastu	1·875	75	100·0	30 + 50	106·6
Total.....	...	...	806·6	...	800·0

[1] o.r. = old reckoning; c.r. = common reckoning.
[2] 633·4 li = 800 — 60 — 106·6.

It may be objected to my explanation of the distances that there is no authority for believing that Yuan Chwang occasionally departed from his usual custom of stating these in the measure of common reckoning. I think, however, that there may be. Both he and Fa-hian record 30 li south-east from Kapilavastu as the distance to the site of the 'arrow-well.' If Fa-hian's yojana is greater than that of Yuan Chwang, a fact which, I believe, is universally allowed, and each divides the yojana by 40 for the li, Yuan Chwang must here have recorded the distance in Fa-hian's measure and not in that of common reckoning. The distance of 30 li to the arrow-well, I submit, tends to confirm the opinion I have set forth in the table that Yuan Chwang's distances round about Kapilavastu may be stated in the old measure, that is, that the 30 li and 50 li are in old reckoning.

If this be so, Yuan Chwang has recorded the distance from Napika to Kapilavastu as being 2 *old* yojanas, whereas Fa-hian makes the same distance *less* than two old yojanas, that is, about 1·875 old yojanas. According to Fa-hian, the distance between these two towns has been overstated by Yuan Chwang to the extent of 6·6 li in common reckoning, which, if added to the 633·4 li, the distance from Śrāvastī to Napika, makes the record of each pilgrim, for that part of the journey, exactly the same.

Reviewing the discussion of the figures representing the distances given by Fa-hian and Yuan Chwang from Towai to the city of Kapilavastu, it is pretty certain that—

(1) Towai was 60 li in common reckoning from Śrāvastī city.

(2) Śrāvastī city to Napika was 640 li in common reckoning.

(3) Yuan Chwang's numbers 50 li and 30 li, equal to 2 yojanas, are both *approximately* correct for the distance from Napika to Kapilavastu city, but are, if correct, records in the *old* measure, and are respectively equal to 66·6 li and 40 li in common reckoning. The sum of the two distances, 80 li, or

106·6 li in common reckoning, is almost certainly overstated to the extent of 6·6 li in common reckoning, in consideration of the statement of Fa-hian that the distance was *less* than two yojanas.

(4) It is more probable that the distance from Napika to Kanakamuni was 50 li in common reckoning, and that the distance from Kanakamuni to Kapilavastu was also 50 li of the same measure; and that the difference of 6·6 li in common reckoning, in the total distance from Towai to Kapilavastu, is to be accounted for by Fa-hian making the distance that number of li further between the cities Towai and Śrāvastī.

I believe that the 50 li of Fa-hian and the 60 li of Yuan Chwang from Śrāvastī to Towai are the nearest whole numbers in multiples of 10. When search has been made it will probably be found that the full distance to Towai from Śrāvastī is somewhere about 63 or 64 li in common reckoning. This distance Yuan Chwang, on this supposition, has recorded as "60 li or so." Three-fourths of 63 or 64 li would make the journey in the old measure 47·25 or 48 li. This Fa-hian has recorded as "50 li."

After comparing the distances in the manner I have done, I consider I have proved that the yojana of Yuan Chwang was $\frac{3}{4}$ of the value of the yojana adopted by Fa-hian, or, in other words, that Fa-hian employed the old measure mentioned by Yuan Chwang.

As the yojana of each pilgrim was divisible into 40 li, it follows as a matter of course from the yojana of common reckoning having a value $\frac{3}{4}$ of that of the old yojana, that the li of common reckoning was $\frac{3}{4}$ of the value of the old li.

If Yuan Chwang has recorded the distance of some places in the old measure an explanation would be difficult. It may be that when he travelled in India the sites of certain places about Kapilavastu and elsewhere, which had been famous in Buddhist history, were then matters of tradition only, the

structures having become obliterated, and that he stated their position and bearing from records to which he had access, or from local inquiry.

I cannot recall any evidence to prove that in Fa-hian's narrative there are instances where distances are mentioned in the yojana of common reckoning, although it is possible that there are.

The value of the *pace* now only remains to be ascertained.

"Leaving the city [that is, Śrāvastī] by the south gate, and proceeding 1,200 paces on the road, on the west side of it is the place where the lord Sudatta built a *vihāra*." [1]

"To the south of the city [that is, Śrāvastī] 5 or 6 li is the Jetavana. This is where Anâthapiṇḍada (Ki-ku-to) (*otherwise called*) Sudatta, the chief minister of Prasênajita-râja, built for Buddha a *vihāra*." [2]

Yuan Chwang seems to give the measurement from the city of Śrāvastī to the northern boundary-line of the Jetavana. Fa-hian's measurement is *to* the *vihāra* of Sudatta, which he informs us was in the "middle" of the Jetavana enclosure. Their measurements are, therefore, not between the same points.

Yuan Chwang's li contained 9,600 finger-breadths (see Table), so that there are 48,000 fingers in 5 li, and 57,600 in 6 li of common reckoning. Supposing that Fa-hian and Yuan Chwang's distances had represented measurements between precisely the same points, the numbers 48,000 and 57,600, divided by 1,200 paces, would give 40 and 48 finger-breadths respectively for the length of a pace.

Bearing in mind that the Old Chinese foot was of 8, 9, or 10 fingers, it would appear probable that at one time there was some fixed proportion between the length of the pace and foot, and that when the foot was of 8 fingers that the pace was of 48 fingers; when of 9 fingers, that the pace was of 54 fingers; and when of 10 fingers, that the pace was of 60 fingers; that is, that the pace was 6 feet of the particular scale in use.

[1] Beal, i, chap. xx, p. xliv.
[2] Beal, ii, p. 4.

Jervis gives in minute detail a table of Old Chinese lineal measures, in which the foot is of 10 fingers and the pace actually is of 60 fingers.[1]

For the reasons advanced it seems likely that we should conclude that the pace of each pilgrim was of the same value, and that it contained 60 finger-breadths, because the foot-measure of both was of 10 fingers.

It should, however, be noted that 60 finger-breadths divide without a remainder the number of fingers which constitute the li and yojana of common reckoning, but that in the case of the old yojana, dividing by 60 gives a remainder. It is, therefore, probable that Yuan Chwang's pace contained 60 fingers and Fa-hian's 80 fingers, and that the pace, like the li and the yojana of the earlier pilgrim, was of one-third greater value than the corresponding measure of Yuan Chwang.

Using 60 fingers as the value of the pace, Fa-hian's measurement to the "middle" of the Jetavana, from the south gate of the city, was exactly 7·5 li in common reckoning. If we take 5·5 li, the mean of Yuan Chwang's figures, as the distance to the northern edge of the garden from Śrāvastī, we can easily calculate approximately the area of the Jetavana. Its length was 4 li in common reckoning, as the Jetavana *vihāra* was in the middle of it. Its breadth was twice "60 or 70 paces." Twice 70 paces equal 8,400 finger-breadths, or $\frac{7}{8}$ li. The li is ·1322 of an English mile (the yojana being valued at 5·288 miles), that is 232·672 yards, of which $\frac{7}{8}$ is 203·588 yards, the breadth of the garden. Four li equal ·5288 of a mile, or 930,648 English yards. The area was thus 930·648 yards in length by 203·588 yards in width.

The breadth of the Jetavana is obtained from the position of the *saṅghārāma* in which the pilgrims were informed that Buddha held the discussion with the heretical schools, and where they also saw a "sitting figure" of Buddha. The saṅghārāma was 70 paces[2] north of the eastern gate of the

[1] Jervis, p. 324.
[2] Beal, ii, p. 10; i, chap. xx, p. xlvii.

Jetavana enclosure, on the western side of the road which here formed the boundary of the garden. It was also "60 or 70" paces to the east of the Jetavana vihāra, according to the later pilgrim. As the Jetavana vihāra stood in the centre ("middle") of the enclosure the breadth of the garden was twice 60 or 70 paces.

If 80 fingers be taken as the value of the pace of Fa-hian, the distance to the Jetavana vihāra would have been in common reckoning 10 li, from which, if we deduct 5·5 li for the distance from the city to the northern edge of the garden, we would get 4·5 li common reckoning for half the longitudinal measurement. The breadth would remain $\frac{7}{8}$ of the common li. It is possible that 60 or 70 paces, for half the transverse measurement of the enclosure, is recorded in the old scale. If so the breadth of the Jetavana would have been $1\frac{1}{6}$ common li.

The Jetavana is stated to have been "a thousand cubits in length and breadth."[1] That would make the square area 576 millions of finger-breadths, which in common reckoning would approximately be $5\frac{1}{4}$ li long by $1\frac{1}{6}$ li broad, or 7 li long by $\frac{7}{8}$ li broad.

[1] Hardy, p. 224.

Art. III.—*Preliminary Notice of the Tibetan Manuscripts in the Stein Collection.* By L. D. Barnett.

Among the treasures brought to light by Dr. Stein in his excavations in Chinese Turkestan and lodged by him last summer in the British Museum, not the least interesting was a collection of fragmentary Tibetan manuscripts. These were found in the ruins of a Buddhist shrine buried in a site beyond the Endere stream, at the extreme eastern limit of the region explored, under circumstances which have already been detailed in Dr. Stein's "Preliminary Report," pp. 55–56. It suffices here to say that the conditions under which the fragments were discovered were such as to make it practically impossible to date them later than the eighth century; and the evidence of a Chinese sgraffito in the same building has since proved this conclusion to be right. Hence they came to us as the earliest known relics of Tibetan literature.

By far the greater part of the collection consists of a series of fragments of which it was plain at first sight that they belonged to one large *pothi*. They are of very various sizes, in differing degrees of preservation, and they are written in an elegant professional hand hardly to be distinguished from modern scripts. A hasty inspection sufficed to show that they formed part of a treatise on Buddhist philosophy. I did not however give to them a closer study for some time, and then Professor Bendall in the course of a casual conversation suggested to me the possibility that they might belong to the Śālistamba-Sūtra. This conjecture I did not at once follow up; but almost immediately afterwards an investigation from a different starting-point proved to me that he was right in his surmise. About the same time Professor de la Vallée Poussin, who was engaged in preparing an edition of this very Sūtra, made the same discovery from a study of the facsimiles published in Dr. Stein's "Preliminary Report," plate xvi.

Thus we have recovered about one-half of what is probably the earliest Tibetan version of this short text, in a manuscript written not later than the latter half of the eighth century. The importance of this in all respects is great. Hitherto the text has been known from two sources only — the comparatively modern Tibetan version in the Kanjur, and the fragments of the original Sanskrit embedded in the Śikṣāsamuccaya, Bodhicaryāvatāra-ṭīkā, Mādhyamikā Vṛtti, etc. Our manuscript, though fragmentary, is older and better than any of these sources, and supplies an invaluable criterion of criticism. In the main it strongly supports the version of the Kanjur, which indeed seems to be little more than a later revision of it, with occasional expansions and substitutions of glosses for earlier and more ambiguous terms. As an instance of the latter peculiarity I may mention the following. The Sanskrit has *neśvaranirmito*; our MS. reads *dbaṅ pos ma spruld*; the Kanjur has the banal *dbaṅ p'yug ma byas.*

This brings us to another important consideration. Being the oldest known specimens of Tibetan writing, the Stein fragments in general, and particularly the carefully written manuscript of the Śālistamba-Sūtra, are of enormous importance for the knowledge of Tibetan palæography and orthoepy. Even if we confine ourselves to the Śālistamba, we find a wealth of material for this study.

The most novel and interesting feature in the spelling of the Śālistamba is the presence of a final *-d* at the end of most of the roots which in the modern language terminate in *-r*, *-l*, or *-n*. The following instances may be quoted :—

rkyend.	*'breld.*
'k'ord.	*smyind.*
rgyund.	*stsald.*
bsgyurd.	*'dzind.*
[*b*]*rtend.*	*ond.*
'dond.	*rold.*
nord.	*lend.*
spruld.	*rland.*
'p'eld.	

In these cases the spelling is fairly uniform; but isolated instances occur where these roots are spelt in the modern fashion, viz., *rkyen, bsgyur, rten, brtan, tsol, 'brel, len, rlan.* This proves that the final *-d* was beginning to be dropped in conversation, and was only preserved by literary tradition. On the other hand, no trace of this dental appears in *yin, bden, p'yin, ril, t'er, bral, yul, żen, lhan, mṅal, bżin, p'yir, mṅon, bon, ñon, ldan, gżan, mt'san,* etc.

Another singular feature is the presence of *y* between *m* and the high vowels *i* and *e*. Thus we find *myi, myiṅ, mye, myed, dmyigs,* but *me t'og. Yaṅ* is always written after vowels where the Kanjur has *aṅ*; and the determinative *pa* after verbal roots is almost always changed to *ba* after vowels and nasals. Some apparent irregularity is found in aspiration; thus, on the one hand *me t'og,* on the other *byaṅ cub* (once) and *nam ka* (once).

Occasionally, too, a short final *-a* is lengthened before a short pause to *-ā*, though at the end of sentences the ending *o* is added, as in the modern language. So we find *pā, bā, nā*; and at the end of a line even *myī* seems to occur. In one case, *gsō*, the lengthening appears to be radical. On the other hand, words like *mk'a*, which in the modern language are spelt with three letters (e.g. *m* + *k'* + vowel) seem to vary in spelling; thus we find *bka* and *mk'a* spelt triliterally, and at the same time *mk'a* in two cases without a final vowel.

As regards palæography, it is worth notice that the character corresponding to the Sanskrit initial *a* has sometimes a small hook curling towards the right, which is attached to it at the top, on the right hand. Otherwise the script is simply the common modern *Dbu-can,* and has none of the peculiarities of the Wartu and Lancha characters which are supposed to have been brought from Kashmir and Nepal respectively[1] in the seventh and eighth centuries.

The remainder of the collection may be briefly dismissed. The most important part is a sheet containing two poems glorifying the Buddha and the Dharma. The rest consists

[1] See J.A.S.B., 1893, vol. lxii, pt. 1, p. 6.

of unimportant fragments of liturgical works, besides which there are a few votive inscriptions in photographs taken by Dr. Stein.

The historical significance of these discoveries may be summed up in a few words. We have found an Indian Buddhistic culture, an art of pure Gāndhāra type, Indian in origin, but strongly influenced by Hellenism, in various stages, brought to Khotan from the north-western regions of India. In its last phase there suddenly appear the unmistakeable marks of Tibetan aggression, thus confirming the statements of the Chinese annals. Tibet at the end of the eighth century is a growing power, and is now asserting itself in the older centres of Buddhist culture. But the traces of its presence speedily vanish, and the desert sand buries settlements and fields for ever.

What is the secret of this sudden expansion of Tibetan power? Tradition assigns the first introduction of Buddhism and its culture to the second decade of the seventh century, in the vigorous reign of King Sroṅ-btsan-sgam-po, and suggests that the new doctrines made little progress until the reign of that ruler's sixth successor, K'ri-sroṅ-lde-btsan, who invited Śāntirakṣita, Padmasambhava, and other Pandits to Tibet. It was probably in the reign of K'ri-sroṅ-lde-btsan, if not later, that the larger part of the Northern Canon, including the Śālistamba-Sūtra, was translated into Tibetan. If this be so, it is singular that a nation which according to tradition had been hitherto buried in barbarism should within a century and a half have accepted a new faith, assimilated its doctrines in the most scholastic form of Mahāyāna,[1] and concurrently developed a culture and a political organisation which made it a formidable rival to the older homes of civilisation on its north-western frontier. Probably tradition has exaggerated the facts; it may be that Buddhism was fairly well known in Tibet before the seventh century, and

[1] The work of Atīśa, who preached Mahāyāna in Tibet during the latter half of the eleventh century, now appears in its true light. He was merely a reviver of the Mahāyāna that had been taught there three or four centuries earlier.

Sroṅ-btsan-sgam-po was only its Constantine. A new page of history is opening before us.

[At the request of the Editor I subjoin a note on the Śālistamba-sūtra mentioned in the foregoing article. During a recent visit of Professor Louis de la Vallée Poussin to England, we discovered from a joint examination of the Tibetan version of the sūtra that practically the whole text could be pieced together from Sanskrit quotations and put in order from the Tibetan. This he will shortly publish, together with the results of an examination of the several Chinese versions quite recently made by his brother, Monsieur Henri de la Vallée Poussin. One leaf, which I have recognized as coming from the Śālistamba, was recently found by me in Nepal, and is now at the Cambridge University Library.

As Professor Poussin's identification resulted from the publication of facsimile No. 2 on pl. xvi of Dr. Stein's "Preliminary Report," I may here mention that No. 1 on the same plate must form part of a sūtra or short tract on a still more celebrated doctrine of Buddhism, the "noble eight-fold way." The Tibetan original of Feer's *Dharmacakra-sūtra* ("Fragments . . . . du Kandjour," A.M.G., V. 113) will be, I take it, analogous, but not identical.

Similar identifications will doubtless be made from the Sanskrit passages in the Stein Collection.

The excellent results that have attended the publication of these two Tibetan passages makes one regret the more that facsimiles of the extracts from Indian books are not likewise circulated amongst students, especially of the Mahāyāna.[1]

C. BENDALL.]

Additional Note.

With reference to the note of Professor Bendall, it should be explained that the manuscript material in Indian Brāhmī

[1] The Sanskrit documents from this collection recently at British Museum could only be consulted after a promise not to make known their contents.

characters found by Dr. Stein in his excavations on the sites of Dandān-Uiliq and Endere (see "Preliminary Report," pp. 37 ff., 55 ff.), which are still property of the Indian Government, and of which specimens have been reproduced in plates v and xv of the "Preliminary Report," have under an arrangement previously approved by Government been entrusted to Dr. A. F. R. Hoernle for detailed examination and publication in connection with Dr. Stein's "Full Report" now in course of preparation.

L. D. B.

ART. IV.—*A new MS. of the Akbarnāma.* By H. BEVERIDGE.

I AM indebted to Saiyid 'Alī Bilgrāmī Shamsu'l-Ulama for a perusal of this MS. It was purchased by him in Haidarabad.

The MS. is truly remarkable, for it is a *brouillon*, or rough draught, of the first volume of the Akbarnāma. It originally wanted many passages which occur in the Bib. Ind. and Lucknow editions, but most, if not all of them, have been supplied by two or more collators. They seem to have gone carefully through the MS. and compared it with some MS. of the finished work, and they have made numerous additions and omissions so as to bring it into accord with the latter. Where the additions are of some length they are inserted in the margin, and when they consist of only a word or two they are interlined. Some of the additions are verse, and this may remind us of Abul Faẓl's statement in the 'Aīn (Jarrett, iii, p. 415) that he inserted verses on the fifth revision. Perhaps only in two instances, viz., at p. 242, corresponding to p. 246 Bib. Ind. ed., which is the chapter describing Akbar's circumcision, and at p. 346 = Bib. Ind. 349, has a verse originally omitted been inserted in the body of the text, in a blank space left for the purpose. All the other missing verses are, I think, inserted in the margin. There are still many blanks in the MS., but when we compare those places with the printed text we find that most of them, at any rate, do not represent an omission which has been afterwards supplied in the finished work. The words run on in the MS. exactly in the same order as in the Bib. Ind. edition. Most of those blanks are from one to two lines in breadth, and perhaps they are only the copyist's way of indicating the beginning of a new paragraph. Or they may have been intended to be filled up by rubrics, or

have been left for the insertion of verses, which, however, have never been supplied, either in the MS. under consideration or in the MSS. on which the printed editions were founded. Most of the blanks, then, are delusive.

The really interesting and valuable thing in the MS. is not the blanks and the marginal additions, but the existence in the body of the text of passages which do not occur in the printed editions. Apparently Abul Faẓl omitted them when he made one or other of his revisions. These passages are considerable in number, and one or two are of great length and importance. The collator has scored them out, in order to make his MS. tally with the more finished recensions, but fortunately he has only drawn lines across them, and has not obliterated them. The longest passage so scored through is the Fatḥnāma or Bulletin of Victory, drawn up by Shaikh Zain after Bābar's victory over Rāna Sanga. It is styled Firmān of Ẓahīru'd-dīn Maḥommad Bābar Bādshāh Ghāzī, and occupies pp. 109–116 of the MS. It is preceded by a statement—also scored out—to the effect that the bulletin which was sent to various countries has been reproduced verbatim in order that the memory of the great victory may be preserved, and that men may be stimulated to return thanks to God for His goodness. This bulletin is omitted in the Akbarnāma as we have it, but it occurs in Bābar's Memoirs, from which it was doubtless taken by Abul Faẓl. I have compared part of the copy in the MS. before me with that in Ilminsky's edition (Kasan, 1857) of the Turki Bābarnāma (the bulletin is in Persian), which begins at p. 410, eight lines from foot, and have found that the two substantially agree, though there are some verbal differences.

But although this is the longest omitted passage, it is by no means the most important. Indeed, it is probably of no value except as being an early copy of the original. I now proceed to notice the more interesting or important of the scored-out passages, *seriatim*.

1. At p. 10, eight lines from foot, a passage is scored out which gives the date of Akbar's first order for the writing of the Akbarnāma, viz., 22 Isfandārmaz of the 33rd year.

Again, at p. 11, line two from top, a passage is scored out which gives the date of Akbar's second order, viz., 26 Ardī-bihisht of the 34th year. Now it is a curious circumstance that though these two important dates are not found in the printed editions, or in most of the MSS. which I have examined, they occur in the Royal Asiatic Society's MS. No. 117, as I have pointed out in a note at p. 33 of my translation of the Akbarnāma. Their occurrence in the *brouillon* shows that the dates are authentic, though Abul Faẓl, for some reason or other, afterwards omitted them.

2. The next erased passage calling for attention occurs at the bottom of p. 75 and top of p. 76. It occurs there in the biographical sketch of Taimur, and contains an estimate of the number of generations during which the Turks lived in Irgānaqūn. It is to the effect that, though there is no record on the point, the Turks probably lived there for twenty-five generations, i.e. during the times of twenty-five rulers. The corresponding passage of the Bib. Ind., viz. that giving the sketch of Taimur's life, is pp. 77–78, but the scored-out passage does not occur. It ought to come in there at p. 78, six lines from top, and does not. But a very similar passage occurs earlier in the Bib. Ind. ed., viz. at p. 63, thirteen lines from the foot. Indeed, it is the same passage less one or two clauses. It gives the same calculation about the probable number of generations, or rulers, and it is evident that when Abul Faẓl revised his draught, he struck out the passage from his notice of Taimur and transferred it to the account of Taimur's ancestor, Qayān. In doing so he omitted, accidentally perhaps, some words which would have made the principle of the calculation clear. At p. 63 Bib. Ind., he merely says that as there were 28 rulers in the 4,000 years before Irgānaqūn, and there have been 25 in the 1,000 years after it (i.e. up to Akbar's time), it is estimated that there were 25 rulers during the 2,000 years in Irgānaqūn! The reasoning is not obvious, and I have remarked on this in note 2 to my translation, p. 175. But the original entry as given at p. 76, top line of the Bilgrāmī MS., contains a few words which explain the basis of the

calculation, if they do not justify it. The words are, "as the length of life differs in different cycles."

3. At p. 161 = 160 Bib. Ind. some words explanatory of Jahāngīr Qulī's fate in Bengal occur, which are wanting in the Bib. Ind. edition. They have been scored out.

4. At pp. 185–186 a long passage has been scored out which contains an anecdote about Bairām Khān's ancestor Mīr 'Alī Shakr. It tells how Jahān Shāh would only give the government of Kurdistan to a man who could drain a large goblet of wine. Mīr 'Alī Shakr felt tempted to accept the task, but his religious scruples got the better of him, and he declined. However, his mother persuaded him to drink, and he successfully did so and got his government in consequence. This anecdote and also the rest of 'Alī Shakr's biography is not in the Bib. Ind. edition. I may here observe that just before this anecdote there occurs (as also in the Bib. Ind. ed.) the extraordinary statement that Bairām Khān fled to the country (*wilāyat*) of Hardwār from Surat, before he rejoined Humāyūn. It is written Hardwār also in the *brouillon*, but surely it is a mistake for Marūwār (Marwār). The corresponding passage in the Bib. Ind., and where the story about Mīr 'Alī Shakr should come in, is p. 186, l. 13 from top.

5. At p. 195, l. 10, a very interesting passage has been scored out which describes how Quṭb Khān, the vakīl of Sher Shāh (or Sher Khān as Abul Faẓl calls him), was so disgusted with his master's breach of faith towards Rajah Puran Mal that he left his service and turned hermit. The passage does not occur in the Bib. Ind. ed., p. 196, but a footnote there says that it occurs in two MSS. It is certainly one that we should not like to lose, and its occurrence in the *brouillon* supports the truth of the story. Why Abul Faẓl afterwards omitted this interesting trait I cannot imagine.

6. A passage eleven lines long, describing an early attempt of Ḥaidar Mīrzā on Kashmīr, has been scored out, p. 196. It occurs at p. 170 of the Bib. Ind. edition. Apparently Abul Faẓl had at first inserted it in his biographical notice of Ḥaidar Mīrzā, which, indeed, was the proper place for it, and

had afterwards transferred it to an earlier chapter. Following his principle of bringing the MS. into accord with the finished form of the Akbarnāma, the collator has inserted the passage in the margin of p. 170 of the Bilgrāmī MS.

7. The famous letter of Ṭahmāsp about the entertaining of Humāyūn occurs in the MS. p. 205, and probably agrees for the most part with the Bib. Ind. But I noticed one characteristic omission. Ṭahmāsp includes among Humāyūn's titles that of his being "Master of the Dīvs and Peris."[1] This phrase occurs also in Bayāzid Biyāt's copy of the letter, and is undoubtedly genuine, for it is required to jingle with the preceding clause; but Abul Faẓl probably thought the title undignified, and so has omitted it.

8. At p. 225 a passage about Kāmrān making over Akbar to his chief wife, Khānam, and stating that this lady was the mother of Shāh Rukh, has been omitted. Probably this was omitted in the revision lest it should give rise to the idea that Kāmrān was the father of Shāh Rukh. His wife Khānam, also called Mahtarima, married again after Kāmrān's departure to Mecca and death there; and it was by Ibrahīm Mīrzā, the son of Sulaimān Shāh of Badakhshān, that she became the mother of Shāh Rukh (afterwards a son-in-law of Akbar). The scored-out passage is not in the Bib. Ind.

9. p. 254. A long passage scored out; it is not clear why, for it occurs in the corresponding place of the Bib. Ind., p. 255. The collator has copied it out in the margin of p. 250, to which it does not seem to belong.

10. p. 274, top line. Some Arabic words used by Mīr 'Arab scored out. They are not in the Bib. Ind.

11. pp. 277–280. A long and important letter from Humāyūn to Ḥaidar Mīrzā, describing his victory over Kāmrān and their subsequent reconciliation, is scored out. This letter is not in the Bib. Ind. (cf. p. 284). Page 280 of the Bilgrāmī MS. also gives some verses addressed by Humāyūn to Bairām. These are not in the Bib. Ind., but I think they are given by Ferishta.

[1] p. 205, seven lines from foot, *Ṣāḥib-i-dev u parī*, rhyming with the previous clause, *Bādshāh-i-mulk u al ijnab 'adl-gustarī*.

12. p. 270. A passage about Beg Mīrak, and which is not in the Bib. Ind., is scored out.

13. A blank of three lines breadth, but nothing omitted. The MS. here agrees with the Bib. Ind.

14. p. 309. A passage about the accidental death of Abdu'l-Wahab, just after the death of Hindāl, is scored out. The passage is not in the Bib. Ind. (cf. p. 314), but the circumstance is mentioned by another historian (either Niẓāmu'd-dīn or Badaūnī).

15. p. 319. An ode addressed by Kāmrān to Humāyūn, when he was delivered up by Sulṭān Adam, is scored through. The verses are not given in the Bib. Ind., and, so far as I know, this interesting passage is to be found only in the Bilgrāmī MS.

16. pp. 327–331. A long and important letter from Humāyūn to 'Abdu'r-Rashīd of Kashghar is scored out. This letter is not in the Bib. Ind.

17. p. 335. A large blank, but nothing omitted. Cf. Bib. Ind., p. 336.

18. pp. 352–353. A long and interesting letter from Humāyūn to Abu'l-M'aālī is scored out. This letter is not in the Bib. Ind., and I do not know where else it is to be found. Humāyūn calls Abu'l-M'aālī his son (*farzand*), and speaks of him as descended from Mu'izzu'd-dīn Shāh. He speaks of Akbar as the Mīrzā. The letter is one of advice and remonstrance on account of Abu'l-M'aālī's not co-operating with Akbar and Bairām Khān. In the *brouillon* Abul Faẓl speaks of inserting it verbatim as a model letter. Perhaps Akbar made him strike it out when the Akbarnāma was read to him.

19. p. 362. A letter said to have been written by Humāyūn to Akbar after his accident, and describing his fall, etc. This letter is not in the Bib. Ind., but is, I believe, to be found in the Mirāt-al-'Aālm. It was conveyed to Akbar by Nāẓir Shaikh Cūlī. It is also stated that when Nāẓir Shaikh Cūlī came to Humāyūn to take leave before setting out with the letter for the Panjab he asked if there was any verbal message. (It is well known to be an Oriental custom to send

really important communications, not in a postscript, but by word of mouth.) Humāyūn replied by two Turkī words, given in the MS. p. 362, four lines from foot, of which the purport is said to be, "Go and tell what you have seen," or literally, "Having seen, go." Whether Humāyūn was able to write or dictate this letter may be doubted, but in all probability the letter was really written and sent to Bairām and Akbar just after the accident. It is therefore an early and important record. The letter and the few explanatory words which follow it in the *brouillon* may be said to clear up all doubts about the dates of Humāyūn's accident and death, about which Blochmann and others have made notes. It is clearly stated that the fall occurred on Friday the 11th of the month (Rabī'al-awwal), and that Humāyūn died on the following Sunday, the 13th idem. It will be remembered that Abul Faẓl does not give the day of the month in the Akbarnāma (cf. Bib. Ind., p. 363). He only says that the fall occurred on a Friday. Perhaps the reason why he was not more definite was because he knew that the date was given in the original document, viz., the letter sent by Nāẓir Shaikh Cūlī. When he struck out this document he may have overlooked the fact that it was the only place which gave the date.

Conclusion.

To sum up: the MS. is, so far as I know, unique, and shows us the original condition of the Akbarnāma. It contains four important letters which do not occur in the printed editions of the Akbarnāma, and two, if not three, of which do not seem to occur anywhere else, i.e., not in collections of Persian letters or in other histories. The four letters are:

(1) One to Ḥaidar Mīrzā, author of the Tārīkh Rashīdī.
(2) One to 'Abdu'r-Rashīd, the ruler of Kashghar.
(3) One to Abu'l-M'aālī.
(4) One to Akbar, describing Humāyūn's accident.

The MS. is a folio, about 10 inches by 6, and contains 368 pages of 21 lines each. The writing is Nast'alīq, and very clear and regular. I do not know who the collators or copyists were. Saiyid 'Alī Bilgrāmī is inclined to think that some of the alterations, e.g. the verses, were made by Abul Faẓl himself. This may be so. The MS. is certainly an old one, and may belong to Abul Faẓl's time. It has the words Tawārīkh Taimurī written inside of the boards, a title which is also borne by the magnificent MS. in the Khuda Bakhsh Library at Patna. There is the date Shawwal, 1069 A.H. (1659 A.D.) on a blank leaf at the beginning. The ink and writing of this date resemble that of some of the corrections, but it may only be the date of ownership.

The MS. ends with the death of Humāyūn. It does not contain the chapter about his inventions.[1]

[1] In the account of the second half of the seventeenth year, B.M. MS. Add. 27,247 differs considerably from all the other MSS. that I have seen, as well as from the Bib. Ind. ed. It looks like a *brouillon* of the second volume. It gives a fuller account of the incident of the Portuguese ambassadors visiting Akbar at Surat than that given in the Bib. Ind. ed., which is translated in Elliot, vi, 42, and gives an abstract of their address, and also describes them as obtaining leave to inspect the fort after it was taken. It also, on p. 244*b*, tells a story about Akbar, when travelling by cart from Surat to Aḥmadābād, indulging in a singing and drinking party with Bāz Bahādur and others, and his assaulting and nearly killing Shāhbāz Khān because he refused to sing.

ART. V. — *The Marwānid Dynasty at Mayyāfāriqīn in the Tenth and Eleventh Centuries* A.D. By H. F. AMEDROZ.

THE following narrative is derived from a MS. of the History of Mayyāfāriqīn by Ibn al-Azraq al-Fāriqi, B.M. Or. 5,803, of which I have already given some account; see J.R.A.S., 1902, p. 785.

The history of the dynasty opens, at fol. 121*a*, with the account of Bād the Kurd—Abu 'Abd Allah al-Ḥusain b. Dūstak al-Ḥārbukhti[1]—a native of the Bahasma hills near Ḥizān. So long as 'Aḍud al-Daula lived he prudently kept to the mountains (Ibn al-Athīr, ix, 25), but in 374, after his death, he seized Mayyāfāriqīn and held it with the rest of Diyār Bakr against the generals of Ṣamṣām al-Daula the Buwaihid, and against the sons of Nāṣir al-Daula the Ḥamdānid.[2] But the latter, with the Oqailids, were too strong for him at Mosul, and it was in an attempt against that city that he met his death in battle near Ṭūr 'Abdīn, in 380 (fol. 122*a*). Bād had a sister married to Marwān b. Lakak al-Ḥārbukhti, a native of Kurmāṣ, a populous village between Qal'at Is'ird and al-Ma'dan, where he owned a mill.

[1] Ibn al-Athīr writes the name Bādh, and suggests, on the authority of a Kurdish informant, that his name was Abu Shujā', and that Abu 'Abd Allah al-Ḥusain was his brother (vol. ix, 26). A brother, Abu'l-Fawāris al-Ḥusain, is mentioned by Ibn al-Azraq as appointed by Bād in 374 Governor of Mayyāfāriqīn (fol. 121*a*). He predeceased Bād, being killed in battle against the troops of Bahā al-Daula, the Buwaihid, near Naṣībīn (fol. 122*a*). The name Ḥārbukhti occurs again on fol. 122*b*. There was a Kurdish tribe called Bukhti in Diyār Bakr; see "Chéref Nàmeh," F. B. Charmoy, St. Petersburg, 1868, vol. i, pt. 1, pp. 58 and 61 (No. 39).

[2] Evidence of Bād's success is afforded by a letter written in the name of Ṣamṣām al-Daula in 375 A.H. to the Chief Ḥājib at Naṣībīn enjoining him to assist in withstanding Bād, and also to forward to the capital

الوثيقة المكتوبة على باد الكردى

presumably the document defining his rights and liabilities. The letter is one of a batch contained in the MS. Paris, 3,314 (at fol. 214*a*) which purport to be from the pen of Ibrāhīm al-Ṣābi. But at this date Ibrāhīm's political life was over, though he lived until 384 A.H.

They had four sons, of whom three are named, viz., Abu 'Ali al-Ḥasan, Sa'īd, and Aḥmad. (The fourth was named Kaka, see fols. 137*b* and 156*a* in Or. 6,310, the earlier version of the history, at fol. 91*a*, written "Kuk.") The eldest of them, Abu 'Ali, who was present at Bād's death, after putting to flight the Ḥamdānid force, retired to Ḥuṣn Kayfā; hastened thence with his uncle's widow (a Dailamite whom he afterwards married) to Mayyāfāriqīn, which he seized, together with the strong places around; and so established himself as the first of the Marwānid dynasty in Diyār Bakr.[1]

The course of the dynasty was short, even according to Eastern standard; it lasted just under a century. Of its five sovereigns, Abu 'Ali was followed by his brothers Sa'īd and Aḥmad, whose reign of over fifty years—402 to 453 A.H.—formed its culminating point, and was followed by the reigns of his son and grandson. The latter, after being ousted by Ibn Jahīr in 479, regained power for a short period in 486, during the uncertainty in the succession to the Saljuq throne which followed on the death of Malik Shāh (fol. 151*b*), and this, on Ibn al-Azraq's calculation, sufficed to complete the hundred years (fol. 154*a*).

Abu 'Ali al-Ḥasan b. Marwān, 380–386 A.H.

The Amīr Abu 'Ali began his reign by successfully resisting a Greek attack on Akhlāṭ, Manāzjird, Arjīsh, and Barkari in 382 A.H. His authority, which had the support of his brothers, was undisputed, and he had an able governor at Mayyāfāriqīn, the Chamberlain Mammā. Nevertheless he felt himself insecure, for, as he told Mammā, the people, and especially the lighter sort, were wholly in favour of the Ḥamdānids.[2] The Clothes Market, he said, was a centre

[1] Bād's dominions extended also into Diyār Rabī'a, as he held Naṣībīn, Jazīrat ibn 'Omar, and, later, Ṭūr 'Abdīn (fols. 121*a–b*).

[2] The historian says that the rulers of Mayyāfāriqīn were in general benevolent, especially the Ḥamdānid Saif al-Daula. Only the Dailamites under 'Aḍud al-Daula and his successors were cruel, and this was the cause of their being massacred by the inhabitants in the time of Ṣamṣām al-Daula (fol. 120*b*).

of mischief; no one might enter it mounted, and when one of his relatives did so it led to a collision with the people. Moreover, if a soldier or Kurd were insolent, he was beaten well-nigh dead, without leave of Amīr or governor. Now his ideal for the governed was, he said, passive obedience.[1] Mammā advised the following plan. On the festival of the Aḍḥā, when the population had gone beyond the town limits, the Amīr had the gates closed, threw one leading citizen from the wall, murdered others, and pillaged the place, and then, after proclaiming a general banishment, made exceptions in favour of those persons whom he chose should remain in the city. This was in 384 (fol. 123*b*). In 386 the Amīr contracted to marry the daughter of Sa'd al-Daula, the Ḥamdānid, paying down a dowry of 200,000 dirhams. The marriage was to take place at Āmid.[2] The bride's escort included a granddaughter of the celebrated Khaṭīb 'Abd al-Raḥīm b. Nubāta,[3] and on reaching their camping-ground near al-Ruhā, the bride heard at night-time mysterious and disquieting utterances which her companion

[1] His words are—

نفس الامارة نفس شريفة لا توثر غير الاستماع اوامرها والانتهاء الى من اسمها وان لا تخالف فى شئ ابدًا

[2] The phrase is—

نقد لها النقد مايتى الف درهم وشرط ان يدخل بها فى آمد

Compare Dozy, Supp., *sub* نقد.

[3] Ibn Nubāta was one of the literary Court of Saif al-Daula. Discourses delivered by him between 348 and 353 A.H. are mentioned on fols. 114*b* and 115*a*, and he is described on fol. 113*b* as unapproachable in his art. On fol. 121*a*, in the notice of his death in 374, aged 39 years, it is stated that he claimed to have seen Ṣāliḥ b. al-Muthanna and Ṣāliḥ b. abi'l-Ḥujja, and that he handed down traditions from the latter. Ibn al-Azraq adds that the interval between Ibn Nubāta's birth (335 A.H.) and the entrance of al-Ḥujja (the twelfth Imam who disappeared) into the cistern was 60 years on the assumption that that event occurred in 275, but that some put it in 262, which would make the interval between the two events 73 years. Ibn Khallikān, in his life of Ibn Nubāta (Sl. Eng., ii, 110), quotes Ibn al-Azraq's history for the dates of his birth and death, and again in his life of Muḥammad al-Ḥujja (ib., p. 581) for the alternative dates of his birth and disappearance. The latter passage occurs in Or. 5,803, 103*b*, with some curious traditions relating to al-Ḥujja. For Ibn Nubāta, see Brockelm., Gesch. Arab. Lit., i, 92. The family was of great importance at Mayyāfāriqīn, and members of it are frequently mentioned in the MS. as holders of office there.

made light of, but within two days the news came that the Amīr was dead. His death happened thus :—Accompanied by Sharwa, the son of Mammā, he had proceeded by Ḥāni (where the difficulty in getting across the river Ḥauw caused his brother Abu Naṣr Aḥmad to say that if he ever came to rule he would build a bridge there) on to Āmid. Its leading Shaikh, 'Abd al-Barr, met him outside, and was warned by Sharwa, who was friend to the next brother Sa'īd and false to the Amīr, that the inhabitants must be on their guard remembering what had befallen the people of Mayyāfāriqīn. The Shaikh, in turn, warned his fellow-townsmen, who left themselves in his hands. He accordingly laid a plan whereby the Amīr, on entering the town, was to be put off his guard by money being flung in his face, and then whoever killed him was to rule in Āmid. The plan succeeded, the murderer being Abu Ṭāhir Yūsuf b. Damna. Tumult and slaughter followed, and the gates were closed. Sharwa, on approaching the city wall for news, was thrown the Amīr's head and corpse, and he and Sa'īd retired with the troops to Mayyāfāriqīn (fols. 124–5).[1]

Mumahhid al-Daula Abu Manṣūr Sa'īd, 386–401 A.H.

His first act was to confirm Sharwa and his father in office. He then married his brother's intended bride, and interred his corpse at Arzan, where his father Marwān —now blind—with his wife, took up their abode near the tomb. Āmid alone did not submit to the new Amīr; Ibn Damna was practically the ruler there, and terms were come to under which the Amīr was to receive 200,000 dirhams

[1] Ibn Shaddād makes this episode, in error, to be part of the murder of the Dailamite garrison at Mayyāfāriqīn under Ṣamṣām al-Daula, and the person killed to be Abu 'Ali al-Ḥasan b. 'Ali al-Tamīmi, appointed governor in 369 by 'Aḍud al-Daula. And he makes the accession of Mumahhid al-Daula the consequence of Abu 'Ali's expulsion of the inhabitants of Mayyāfāriqīn (fols. 80*a* and 81*b* of Bodl. Marsh 333, as to which see J.R.A.S., 1902, p. 786, n. 2).

yearly with the rights of the Khuṭba and Sikka.[1] Ibn Damna next proceeded to get rid of 'Abd al-Barr. He was in the habit of performing his duties as Qāḍi in the abode of Ibn Damna, who was his son-in-law. The latter now got his assent to a banquet; by this means introduced his partisans, who were recruited from the provision market; murdered the Qāḍi in his daughter's presence, and rejoined the company bearing his victim's head with him. The banquet then proceeded to its close. Later Ibn Damna addressed the populace. After protesting his single-minded devotion to their interest and his natural kindness, he told them that 'Abd al-Barr meditated handing over the town to the Amīr and becoming his vizier, and that he had forestalled his intention by killing him. They might obey him or not, as they pleased.[2] The people submitted to him; his rule proved beneficent and popular; and by gaining over Sharwa he induced the Amīr to appoint him successor to 'Abd al-Barr. He now built himself a palace on the Tigris, where he held great state; he exchanged letters and gifts with the Caliphs of Baghdād and of Cairo, and with the Emperor Basil; his Court was much resorted to; poets praised him, amongst others al-Tihāmi,[3] who, whilst at the Court of Naṣr al-Daula, composed three poems in Ibn Damna's honour. Yet he had begun life as a porter, and a story was current that one hot day, when resting a load of grain in the space between the walls, he reflected that they required to be raised, and vowed that if Allah ever made him ruler of Āmid he would raise them by a cubit. Fortune, says Ibn Shaddād, brought about its wonted exalting of the humble,[4] and the vow was now performed

[1] By the probable omission of some words in Ibn al-Athīr (ix, 51) it is made to appear that the Khuṭba and Sikka were the only rights retained by the Amīr in Mayyāfāriqīn.

[2] The words are—

فمن طاعني كنتُ له ومن عصاني فالامر اليه وهو اخبر

[3] 'Ali b. Muḥammad al-Tihāmi, died 416. See his life by Ibn Khallikān (Sl. Eng., ii, 316) and Brock., Gesch. Arab. Lit., i, 92.

[4] فضرب الدهر ضربانه وجرى على عادته فى انزال اسافل طغامة منازل ساداته (op. cit., 65*b*).

(fols. 125*b* – 126*b*). But fortune's wheel was not stayed. In 415, during the reign of Naṣr al-Daula, there came to Mayyāfāriqīn one Martaj, with gifts from Ibn Damna. He, in turn, was now a father-in-law, Martaj having married his daughter. Martaj was wealthy; his wealth aroused his father-in-law's envy and his own alarm; and he now offered Āmid to the Amīr on certain terms to be guaranteed by him and by his vizier, al-Maghribi. Returning to Āmid, he laid his plans. Four trusty partisans gained admission to Ibn Damna on the pretence of asking for a money grant, and murdered him. The single Farrāsh present roused the guards and the people. They accused Martaj of the deed, and he was suddenly sprung on and killed by the Farrāsh, who fled to Naṣr al-Daula. Disorder and pillage followed, which were terminated by the arrival of Naṣr al-Daula, who gained admission to Āmid only by surrendering the Farrāsh for execution. This he was persuaded to do by his vizier, who asked whether the town was not worth buying at the price, added to which, he said, the Farrāsh's victim, Martaj, had been acting on the Amīr's behalf. Ibn Damna had ruled twenty-eight years.[1]

Resuming the story of Mumahhid al-Daula (fol. 126*b*), we are told of the marks of honour which reached him from Baghdād[2] and from Cairo, and of his public works at the capital. Sharwa continued to be his chief adviser; he was in high favour, and was admitted even into the Amīr's ḥarīm. But he had a favourite, Ibn Falyūs, who was

[1] Ibn Shaddād (op. cit., 81*a*) quotes this statement, and adds that, according to Ibn al-Athīr, he had ruled twenty-three years, but this does not appear in Tornberg's edition, where the only mention of Ibn Damna occurs vol. ix, p. 52.

[2] A contemporary Baghdad historian, Hilāl al-Ṣābi, mentions Mayyāfāriqīn under 392 A.H. (B.M. Add. 19,360, 100*a*). 'Amīd al-Juyūsh being then engaged in repressing the chronic rioting of the hostile sects, an Alīde ringleader fled to Mayyāfāriqīn. Anyone murdering him was promised 100 dinars, guaranteed by the sum being paid down to a trader at Baghdād, and by a bill drawn on him for the amount, سفاتجة, being sent off to Mayyāfāriqīn. But news came of the Alide's death, whereupon 'Amīd al-Juyūsh laughingly said that, as they had gained their object gratis, the sum would serve to rid them of some other evildoer. Of the score of lines which Sibṭ b. al-Jauzi, in the Mir'āt al-Zamān, devotes to the year 392 (B.M. Or. 4,619, 192*b*), four are given to this incident, so it may fittingly find place here. It shows that regular business relations existed between the capital and the frontier city.

hated by the Amīr, and who, in turn, was ever warning Sharwa not to trust his master. He even advised his murder. Sharwa pleaded the favours he had received, but was told to reflect that life was the first consideration. In the end Sharwa was persuaded. He tried poison, but it failed, so he turned to other methods. The stronghold of al-Hattākh was his by grant from the Amīr; it bordered on meadows, and in springtime, at the season of flowers, he was often visited by his master. They were there together in 401, and one day, as they were drinking, Ibn Falyūs, by arrangement with Sharwa, posted men at the gates to prevent any of the Amīr's supporters from entering, and as those of his relatives and friends who were present succumbed in turn to intoxication, they were led off by Sharwa as though to repose, but were, in fact, put under arrest on a pretended order of the Amīr. At length the Amīr felt the need of repose, and retired with a single attendant. Now, said Ibn Falyūs, was the time. Sharwa left him to act; he went in with a naked sword; the Amīr told him to be gone, and, on his delaying, closed with him and shouted to Sharwa for the sword which he had always at hand. Sharwa took it, and struck him on the shoulder. The Amīr exclaimed: "What, Sharwa, you are in the plot against me, and are abetting Ibn Falyūs! you will never more prosper,"[1] and then died.

The two murderers rode off to Mayyāfāriqīn and gained admittance to the town, the watch believing the Amīr to be with them. Not seeing him they attempted to stop Sharwa, but he managed to reach the palace, seized the treasury, and with the aid of the troops made himself obeyed. His first care was to send horsemen to Is'ird to seize Abu Naṣr, the surviving brother of the deceased Amīr, who during some part of his reign had lived in Mayyāfāriqīn, but having imprudently divulged a dream of the moon entering his

[1] يا شروة عملتها علىّ اتبعتَ عرض ابن فليوس و الله لا افلحتَ بعدها

chamber, or, according to another story, the sun alighting on his head, his brother interpreted it to mean that he would bear rule, and told him never to let him see his face again. He was given Qal'at Is'ird with its mill, and the brothers never again met. (Another account was that it was the Amīr who saw in a dream the sun enter his chamber, and his brother seize it from him, and that he thus became odious in his sight.)

We are told that this year was one of drought and scarcity—the jarīb of grain costing ten dinars—and that Abu Naṣr had made a vow that if he came to rule he would make a dole of grain daily in the mosque. The time was now at hand for the fulfilment of the vow. Sharwa, by using the Amīr's seal, had procured the submission of all the fortresses in the district, with the exception of Arzan, which had long been governed by a native of Iṣpahān, al-Khwāja Abu'l-Qāsim. He temporized with Sharwa's envoy, and whilst out hunting with him came across a hurrying rider, who told him Sharwa had murdered the Amīr and had sent to seize Abu Naṣr, whom he was on his way to warn. Abu'l-Qāsim hastened home, gave open expression of his grief at the news, and sent off an urgent message to Abu Naṣr to come to him. The next day saw his arrival, and Sharwa's cavalry returned empty-handed. Abu'l-Qāsim next summoned Abu Naṣr's parents from their son's grave, and before them and the leading inhabitants took an undertaking from him that he would rule justly and be guided by his advice. They then assembled their troops, who promised free service until Sharwa was slain, met and defeated him, and returned with much booty. This Abu Naṣr ceded to the troops, whilst Abu'l-Qāsim distributed among them the contents of the state granaries. Their numbers increased and they advanced on Mayyāfāriqīn. Sharwa was persuaded by Ibn Falyūs that the only escape for them was to surrender the town to the Greeks, and the people, suspecting this, called down curses on them both. Their suspicions were increased by Sharwa despatching his treasure to Ibn Damna at Āmid for safe custody; they

rose; Sharwa's Georgian soldiery discharged arrows at them, whereupon they murdered Ibn Falyūs. Sharwa took refuge in a fort, and the city Sheikhs guaranteed his life. But they failed to control the people, who pillaged the city and called in Abu Naṣr. He drew near and demanded the surrender of Sharwa, and on this being refused cut off supplies from the city. After withdrawing to Arzan for a time during the extreme cold, he resumed the siege, and the people were persuaded to give way and to trust Sharwa to the Amīr's clemency. On the next day, in the last month of 401, he entered the city. His conduct was wise and forbearing, and his vizier, Abu'l-Qāsim, promptly cleared the city of criminals and recovered much of the stolen property. Sharwa was strangled and his body crucified on the scene of his crime; his supporters were expelled from the city; and his victim was interred beside his brother at Arzan (fols. 126–130).

Naṣr al-Daula Abu Naṣr Aḥmad, 401–453 A.H.

Thus opened the longest and most brilliant of the Marwānid reigns. The palace being in ruins, the Amīr's first care was to erect a new one, for which, by his vizier's advice, he chose a site on high ground, adjoining one of the town forts, which he thus incorporated in the edifice, and so guarded against its being held apart from the city and against himself. A convent and church of the Virgin had formerly stood on the site, and its shrines were now removed to the Melkite church. The walls and ceilings of the new palace were gilt, and water was brought thereto from Ra's al-'Ain to supply its basins and baths. It was begun and completed in the course of the year 403 A.H.

Just previous to the festival of the Aḍḥā, arrived an envoy from the Caliph, together with a chamberlain from Sulṭān al-Daula, the Buwaihid, bearing seven robes of honour and a complimentary letter, with a grant to the Amīr of the whole of Diyār Bakr, التشريف المنشور بديار بكر, under the title of Naṣr al-Daula, and the patent, توقيع, was read

out before the leading inhabitants. That very evening came an envoy from the Fatimide al-Ḥākim, bringing likewise the grant of a title, and next day came an envoy from the Emperor Basil, the Sclavonian. All of them were received with great marks of honour, and on the day of the festival the Amīr sat in state with the Baghdād envoys on his right and the Fatimide and Byzantine envoys on his left. The patents were again read, complimentary poems recited, and honours conferred on the envoys (fols. 131*a–b*).

The rule of the Amīr, with Abu'l-Qāsim as his vizier, was exemplary. He lightened the taxes, repaired and settled endowments on the city walls, and, in pursuance of his vow to give one jarīb of corn daily in charity, he now (407–8 A.H.) gave orders to purchase an estate of the approximate yield of 360 jarībs, to be settled on this charitable object. This was done, and the produce was distributed in the mosque down to the time of the author, who invokes the curse of Allah, angels, and men on whomsoever should touch or alter the same (fol. 132*a*). Here follows (fol. 133*b*) the account of the recovery of Āmid and the Amīr's journey there, when he appointed his eldest son, Abu'l-Ḥasan, to be governor, with one Ibn al-Khammār as his secretary—a name which, before the historian's time, had been changed to al-Nakhwār, presumably because it suggested fermented liquor. He also caused an excellent bridge of twenty arches to be built at the spot where he met his son on his arrival.[1] The Qāḍi of Mayyāfāriqīn was appointed to act also at Āmid, and his journeys to and fro by moonlight on the 14th of each month, and the festivities on the way, are described (fols. 133*b*–134*a*).

In this year, 415 A.H., occurred the death of the vizier, Abu'l-Qāsim, to the great grief of the Amīr.[2] His successor was the eminent man of letters Abu'l-Qāsim

[1] The bridge is mentioned only in Or. 6,310, 42*b*—the earlier version of Ibn al-Azraq's history.

[2] The MS. Or. 5,803 puts his death in 410 A.H. (last line of fol. 134*b*), but this must be an error for 415 A.H., for in Or. 6,310, 42*b*, the event is made to happen on the return of the Amīr from his journey to take possession of Āmid.

al-Ḥusain b. 'Ali al-Maghribi. We are told (fol. 134*b*) that on his arrest in Egypt by the Fatimide al-Ḥākim he was imprisoned in the Khizānat al-Bunūd, and escaped (which no one besides had ever done) and joined his father in Irāq, remaining with him till his death.[1] He then served the Oqailid Qirwāsh until he was arrested together with Sulaimān b. Fahd (in 411 A.H., Ibn al-Athīr, ix, 226). Being set at liberty, they both started for Diyār Bakr, but were met on the way by Badrān, the brother of Qirwāsh, who reconveyed them to Mosul, telling Qirwāsh that they were devourers of his substance; and they were again imprisoned. Later they obtained their freedom by bribery, and got to Mayyāfāriqīn. And the Amīr steadily refused to give them up to Qirwāsh. He now appointed al-Maghribi to be his vizier, with the fullest powers, and he proved himself as wise, cautious, and efficient as any vizier who ever served Caliph or Sultan. His close friend, Sulaimān b. Fahd, remained for a time as a guest at Court, until Qirwāsh relented, and he returned to his relatives at Mosul.[2] The vizier is described (fol. 135*b*) as having carried

[1] Three generations of the Maghribi family attained the rank of vizier. The grandfather, Abu'l-Qāsim al-Ḥusain, is mentioned (fol. 116*a*) as assisting in 355 to negotiate a truce between Saif al-Daula and the Greeks, "with whom he was then residing." Why he was there is explained by Ibn al-Adīm in the Zubdat al-Ḥalab (Paris, 1,666, 38*b*), namely, that in 354, when Saif al-Daula ransomed those Moslem prisoners for whom he could not find exchanges, his secretary, Abu'l-Qāsim, "the grandfather of the vizier," went hostage for the payment. The vizier's father, Abu'l-Ḥasan 'Ali, was Saif al-Daula's last vizier (ib., 41*a*), and continued to serve his successor, Sa'd al-Daula (ib., 46*a*). He next served the Fatimide al-'Azīz, but for how long a time is uncertain, for Ibn al-Azraq has told us (fol. 121*a*) that in 377 he was in command of troops sent by Ṣamṣām al-Daula against Bād, and he now says (134*b*) that he served al-Ḥākim, whose reign began only in 386. And his further statement that, whilst his post in Egypt was filled by his son Abu'l-Qāsim, he served first Qirwāsh and then, during ten months, the Buwaihid Sharaf al-Daula, is true, not of him, but of his son; see Ibn al-Athīr (ix, 233–5), who dates the Buwaihid service in 414 A.H. The account in Or. 6,310, 43*a*, is equally confusing. Again, both Ibn al-Athīr (loc. cit.), Sibṭ ibn al-Jauzi (B.M. Or. 4,619, 216*a*), and Ibn Khallikān (Sl. Eng., i, 450) say that Abu'l-Qāsim's father was put to death by al-Ḥākim, and on this De Slane refers us to De Sacy's "Exposé de la religion des Druzes," i, cccl. But the father is not there mentioned among those put to death, and he is mentioned (ib., p. ccxcix) as in the service of al-'Azīz as late as 384, i.e. after the campaign against Bād.

[2] Ibn al-Athīr's story (loc. cit.) is that on their arrest Sulaimān pleaded poverty in answer to Qirwāsh's demand of money, and was therefore put to death; and that al-Maghribi fraudulently evaded payment and got away, and he quotes some poetry on the subject. His estimate of the vizier's character is unfavourable.

on the government in the grand style of Egypt or 'Irāq.[1] In 428 his health failed, whereupon he devised a scheme for ensuring his burial in the Mashhad at al-Ghariyya (the tomb of 'Ali, see Yāqūt, iii, 790). In procuring the consent of the Naqīb of the shrine, he announced that a purse of 1,000 dinars would be placed in his coffin as a means of identification, and when near his end he directed this to be done. His death took place in Ramaḍān, 428 A.H.[2] He had previously announced that a favourite concubine of his was going to be conveyed to Kūfa for burial, and in accordance with his injunctions the bearers now hurried his coffin on to Kūfa by way of Ḥuṣn Kayfā and Jazīra before the news of his death reached the successive halting-places.[3] At the shrine of 'Ali his identity was established by the purse. He was interred there; an inscription placed over him expressed the hope that he might be numbered among the happy believers who had found grace.

The Amīr now remained for a time without a vizier. He was much engaged in public works, such as a hospital

[1] By Ibn Shaddād (op. cit., 88*a*) the vizier is credited with a bequest of books to the Mosques of Mayyāfāriqīn and Āmid, but this is probably an error on his part, for in both the MSS. (Or. 5,803, 134*b*–135*a*, and Or. 6,310, 44*a*) the bequest is attributed to Al-Shaikh Abu Naṣr al-Manāzi (Aḥmad b. Yūsuf al-Sulaiki), a learned and accomplished state secretary who was employed on missions to Constantinople. His life is given by Ibn Khallikān (Sl. Eng., i, 126), where the story of the bequest seems to be copied from this history.

[2] All the later historians, excepting Ibn Shaddād (loc. cit.), put his death in 418 A.H. Sibṭ ibn al-Jauzi (Or. 4,619, 217*a*) and Ibn Khallikān (Sl. Eng., i, 454) give the alternative date, 428, the latter saying that 418 was the more correct. This is not the view of Ibn al-Azraq, for in Or. 6,310, 46*b*, he deals expressly with the point, saying that he had come across many works which gave 428, and a single work which gave 418, which was an error on the scribe's part, inasmuch as from the year 420 to about 425 or 426 it was beyond doubt that the vizier was in Mayyāfāriqīn. This passage does not appear in Or. 5,803, but the date 428 is repeated therein more than once. And it is rendered probable by other dates. According to Ibn al-Athīr (ix, 236) the vizier entered the service of Naṣr al-Daula in 415, which was the year of the death of Abu'l-Qāsim, whom he succeeded. According to both Sibṭ ibn al-Jauzi (Paris, 1,506, 78*b*) and Dhahabi (B.M. Or. 50, 44*b*) he served two terms of office, for which three years scarcely suffice. His successor, Ibn Jahīr, was appointed only in 430 A.H. (Or. 5,803, 137*b*), and although there was an interval, the office can scarcely have remained vacant for so long a space as twelve years.

[3] The vizier's scheme is related by Ibn al-Athīr (ix, 255), who probably derived the story from the "Muntaẓam" of Ibn al-Jauzi, for Sibṭ ibn al-Jauzi relates the same in the Mir'āt al-Zamān (Or. 4,619, 216*b*) on that authority, and in similar terms, and then gives the story of the purse on the authority of the "History of Mayyāfāriqīn."

(133*b*); a mosque (135*b*) with an hourglass[1] therein (136*b*); and a palace to lodge himself and his relatives, on the bank of the river Sātīdamā, from which it was irrigated by a water-wheel. In the spring season the Court moved thither, spending two nights on the way at halting stations of which traces remained in the author's time. The Amīr further settled endowments on various bridges, and, in pursuance of the vow made on his way to Āmid with his brother Abu 'Ali, he had one constructed over the river Ḥauw (137*a*). His rule was prosperous and beneficent; his Court was resorted to by poets from all quarters[2] who sang his praises, and served as a safe asylum for those in need of a refuge. One of these was the Buwaihid al-Malik al-'Azīz, son of Jalāl al-Daula, who on his father's death in 435 (Ibn al-Aṯīr, ix, 353) settled at Qal'at Is'ird, and died there. From him the Amīr acquired two objects, each of great though diverse value—the red ruby called the Jabal Yāqūt, weighing seven miṯqāls, which became known as the Marwānid gem (and which, according to the Mir'āt al-Zamān, Paris, 1506, 78*b*, he gave later to Ṭuġril Beg the Saljuq); and a copy of the Qur'ān in the handwriting of 'Ali. For these the Buwaihid received the sum of 10,000 dinars (fol. 149*b*), and he told the Amīr that he had brought him both this world and the world to come (fol. 136*b*). Another eminent refugee was the infant grandson of the Caliph al-Qā'im, who succeeded him in 467 with the title of al-Muqtadi. He was conveyed by his mother to Āmid on the revolt of al-Basāsīri at Baġdād in 450. The fugitives were met by the Amīr in person, who lodged them in the palace at Āmid with an ample allowance for their maintenance. The Qāḍi, Ibn al-Baġl, begged to be allowed

[1] بنكام, the Persian پنگان. See Dozy, Supp., *sub* مَنجانة.

[2] The MS. mentions al-Tihāmi (*supra*, p. 127, n. 3), Abu'l-Riḍā b. al-Ṭarīf, Ibn al-Sūdāwi, and Ibn al-Ġhaḍīri (the earlier version, 45*b*, has Ibn al-Maṭīri). Ibn al-Aṯīr (ix, 52) mentions also Abu 'Abd Allah al-Kāzarūni, through whom the Shafeite doctrine was spread throughout Diyār Bakr. (Muḥammad b. Bayān b. Muḥammad, died 455 A.H., see Ḏhahabi, Ta'rīḵh al-Islām, B.M. Or. 50, 53*b*.)

to defray the charge; the Amīr said that a descendant of the Caliph could only be at his Court as his own guest, but eventually he yielded to the Qāḍi's request (fol. 138*b*). On the Caliph's restoration to Baghdād by Ṭughril Beg they returned there with gifts of the value of 200,000 dinars. This redounded greatly to the credit of the Amīr (fol. 139*a*, cf. Ibn al-Athīr, x, 6–7).

The popularity and influence of the Qāḍi, Ibn al-Baghl, at Āmid, ended by awakening the distrust of Ibn Jahīr, who had now succeeded al-Maghribi as vizier. He reminded the Amīr of the career of Ibn Damna, and by his advice a son of Ibn Baghl was appointed in 449 to the post of Qāḍi of Mayyāfāriqīn, as hostage there for his father. Two years later Ibn Baghl was arrested and died in prison (fol. 142*a*).

But mischief to the Marwānid line was to come, not from the Qāḍi, but from the vizier, Fakhr al-Daula Ibn Jahīr (see his life by Ibn Khallikān, Sl. Eng., iii, 280). Born of a good family in Mosul, he was allied to a leading man there named Ibn Abi'l-'Aqārib. Rivalry between the two developed into hostility, and Qirwāsh, under a threat from Ibn Jahīr's rival and family of quitting the place, transferred Ibn Jahīr to an official post at Ḥalab, of which he had lately become master. Enemies procured his dismissal, whereupon he sought the permission of Naṣr al-Daula to come to his territory as a private individual. This was refused on the ground that had he been a man of integrity he would not have quitted Mosul. But the want of a vizier at Mayyāfāriqīn was making itself felt (fol. 137*b*). The Christians gained in strength, and a military 'Āriḍ, having broken a man's head at chess, took refuge with a cousin of the Amīr, who refused to give him up. In his anger the Amīr went in person to enforce obedience, and was received with a taunt of having gone forth against a cousin as if to attack Kharshana,[1] or some such Greek stronghold. This led the Amīr to summon Ibn Jahīr; he was received

[1] Near Malaṭīyya (Yāqūt, ii, 423).

with great honour, and appointed vizier with the fullest powers[1] and with the title of Kāfi al-Ḍaula, in 430 A.H.[2]

Once only was the Amīr's territory attacked by a hostile force, namely, by two Saljuq officers, sent by Ṭughril Beg with 10,000 horse to invade Diyār Bakr, which he granted them as a fief. (The date given for this in both the MSS., 434 A.H., must be an error for some later date.) On their approach the city gates were closed; a large sum was offered to induce them to withdraw, but was refused. One night, however, in a drunken quarrel, they stabbed each other dead, and the Amīr sallied out with his troops, pillaged their camp, and took many prisoners (fol. 139*a*).[3]

About this time also occurred a miscarriage of justice (fol. 139*b*). The Amīr being at enmity with Qirwāsh—possibly in 440 (Ibn al-Athīr, ix, 375) — the Qāḍi at Mayyāfāriqīn, Abu'l-Murajjā Abu Bakr, having occasion for a certain lawbook, told his secretary to write to a friend at Mosul to procure him a copy, and the secretary entrusted the letter to a man who was going to Mosul (with ten dinars for the copy, Or. 6,310, 53*b*). The commission was overheard by a soldier and reported to the Amīr. The Qāḍi denied on oath that he had written, whilst the secretary admitted the letter, and stated its object.

[1] The words are (Or. 5,803, 138*a*, corrected by Or. 6,310, 49*b*): ردّ اليه الامر والنهى وحصل اليه الحل والعقد و فوضت اليه جميع الاشغال

These terms imply a vizier 'of delegation' as distinct from the more restricted vizier 'of execution.' See "Al-Aḥkam al-Sulṭāniyya" by al-Māwardi, transl. Ostrorog, Paris, 1901, i, 197.

[2] Ibn al-Athīr (x, 121) makes this happen later. He says that Ibn Jahīr was in the service of a concubine of Qirwāsh, and that after the latter's deposition (i.e. in 442) his brother Baraka employed him as envoy to the Greeks, when he successfully claimed precedence over the Marwānid envoy; that later he fled to avoid arrest, and entered the service of the Mirdāsid ruler of Ḥalab; that from there he went to Malaṭiyya, and then entered the Amīr's service. Ibn al-'Adīm (op. cit., 73*b*) says that he came to Ḥalab as vizier in 445, and that in 446 he resigned and entered the Amīr's service. Dhahabi, in the Ta'rīkh al-Islām, Or. 50, 188*a*, puts the event in 440, "towards the close of the Amīr's reign," on the authority of a quotation by Ibn al-Najjār from the History of Muḥammad b. 'Abd al-Malik al-Hamadhāni, who died in 521, i.e. thirty-eight years after Ibn Jahīr.

[3] Sibṭ ibn al-Jauzi says of the Amīr (Paris, 1,506, 78*b*) that he was in the habit of warding off hostile attacks by money payments. See also Ibn al-Athīr, ix, 411 and 433.

But the Qāḍi's denial caused doubt; he was imprisoned in a fort, and the door of his cell plastered up, طُيِّنَ عليه, so that he died (fol. 139*b*).

The improvements to the town continued. Walls were repaired, baths built, and a surplus from charitable endowments was applied in bringing water from Ra's al-'Ain through the walls into the city. One conduit was made by a wealthy citizen, a broker, at his own cost, by which water from a number of springs was collected and brought through the centre of the city. And though the pipe passed by his door, he refused to divert a single drop for his own use. Until then the city had depended on wells, the first pipe having been laid by Saif al-Daula to supply the palace (fol. 140*a*).

A fine (مصادرة), and the solitary one under the Amīr's rule, was inflicted, sad to relate, on this beneficent broker. He was intimate with the ruler of the neighbouring tribe of Sunāsuna[1] (on whose confines the Amīr had constructed a fort to keep them in check), and an enemy of his suggested to the Amīr that he might betray the city to them. His house was searched and weapons discovered, whereupon he was fined 400,000 dinars: 80,000 dinars, besides property in kind, remained for his heirs; still the Amīr was deceived into acting as he did (fol. 140*b*).

Trade flourished and wealth increased under the Amīr's rule. A broker who had bought up an entire caravan load

[1] The tribe was attacked by Saif al-Daula the Ḥamdānid in 328 A.H. (J.R.A.S., 1902, p. 797). The Amīr Abu 'Ali was married to a daughter of Sankhārīb, their ruler (fol. 125*a*), who is probably the Sénékérim-Iohannes of the Armenian house of Ardzrouni; see Collect. d'Hist. Arméniens by M. Brosset, St. Petersburg, 1874, vol. i, p. 248. Ibn al-Athīr (ix, 306), in relating how Nāṣr al-Daula had to check the tribe's attacks on the pilgrims from Ādharbījān, says they were Armenians who lived in the neighbourhood of Akhlāṭ, and that they held their strongholds under treaty until 580 A.H., after which they fell gradually to the Moslems. The tribe were evidently regarded as dangerous neighbours (see *post*, p. 149), and under al-Ruzbaki, the Saljuq governor at Mayyāfāriqīn, 509–512 A.H., whose weak rule led to the appointment of Īl Ghāzi, the first of the Ortoqid dynasty, the tribe was said to have annexed as many as thirty villages in the neighbourhood of 'Ādiljiwāz (fol. 160*a*).

of raw hides, resold them that same day at a profit of 500 dinars of 'Romanos,' i.e. of Byzantine issue. The Amīr, hearing of this, sent for the man, who attended bringing the money, admitted his profit, and tendered it to the Amīr, who refused it, protesting that his sole motive was to ascertain the fact of such a profit having been made in his territory. A contest of self-denial followed, which ended in the broker applying the sum in purchasing an endowment for the garrisons of certain fortresses (fol. 140*b*).[1]

The Amīr's long reign was nearing its close; the historian compares it to a continual festival. His wives were four in number, viz., a daughter of Faḍlūn b. Manūčhihr, the ruler of Arrān and Upper Armenia,[2] and the mother of his son Sa'īd; a daughter of Qirwāsh of Mosul; a daughter of Sankhārīb, ruler of the Sunāsuna tribe, the widow of his brother 'Ali; and a fourth, a slave girl from Egypt, whose owner refusing to sell her on the ground that he had a son by her he had perforce to marry. But to his first-mentioned wife this course seemed neither necessary nor tolerable, and she departed on a visit to her father, leaving her son Sa'īd with the Amīr, and never returned. The Amīr's ḥarīm numbered 360, and he was always prepared to add an

[1] Ibn Shaddād (op. cit., 85*b*) makes the broker son of the victim of the unjust fine. Ibn al-Azraq's narrative does not confirm this; but, if true, the man's evident expectation of being deprived of his gain may have been based rather on family experience than on general usage.

[2] This Faḍlūn is mentioned as Amīr of Janzah (Gandza) under the Bagratid Gagīc, who reigned 989–1020 A.D. (Brosset, "Histoire de la Géorgie," i, 299, who gives a pedigree of the family taken from Fraehn, ib., p. 344). In 496 A.H. Manūčhihr, brother of Faḍlūn al-Rawādi, was ruler of Āna (Ibn al-Athīr, x, 247*a*), and a later Faḍlūn is connected with the grandfather of Saladin. On fol. 181*b*, in reference to the revolt of the priests at Āna in 550 A.H., when Faḍlūn was substituted as Amīr for his brother Shaddād—an event mentioned also by Ibn al-Athīr, xi, 133—we are told that the latter went to Syria and joined Saladin's uncle, Asad al-Dīn Shīrkūh, whose father, Shādhi, had been a retainer of Faḍlūn's family, which had been long established in the district under the name of Bait ibn abi'l-Asāwir b. Manūčhihr as owners of Arrān, Janzah, and its neighbourhood. Later, Shaddād took service under the Ortoqid Najm al-Dīn Īl Ghāzi of Māridīn, who granted him the castle which Naṣr al-Daula had built on the Sunāsuna frontier. Ibn al-Azraq says that when on his way to Tiflīs in 548 he met him at Mayyāfāriqīn and at Āna.

inmate regardless of price. We are given very precise details as to his distribution of time between his duties and his pleasures (fols. 140*b*–141*a*); and after his death a courtier humorously remarked that he had reigned, not 53, but 106 years: لان لياليها كانت احسن من ايامها. Other rulers, says Ibn al-Azraq, may have possessed greater dominions and wealth: none surpassed him in prosperity and enjoyment. And he instances his good fortune in having been served by two viziers of the first rank—al-Maghribi and Ibn Jahīr. So bright a picture in the present suggested a dark vision of the future, and such a vision was duly disclosed by an Indian astrologer, who predicted to the Amīr that later his sovereignty would pass to one who had been high in his favour, who in turn would soon be deprived of it. The Amīr said this must refer to his vizier, Ibn Jahīr, and, addressing him, he commended his issue to his care. The historian adds that Ibn Jahīr told his grandfather, when Nāẓir of Ḥuṣn Kayfā, that from that time forth until the event happened he nursed the project of acquiring Diyār Bakr (fol. 141*b*).[1]

In 453 the Amīr died, and was buried at Mayyāfāriqīn (fol. 142*b*). The biographies of him given by Ibn Khallikān (Sl. Eng., i, 157), by Sibṭ ibn al-Jauzi (Paris, 1506, 78*b*), and by Dhahabi (Or. 50, 44*b*) are largely derived from this history, with some additions from other sources. Ibn al-Athīr's brief narrative of his accession (ix, 52) and of his death (x, 11) are not apparently so derived, and his history contains matter not to be found herein relating to events outside Mayyāfāriqīn. Such are the Amīr's dealings with al-Ruhā and its owner, 'Uṭair al-Numairi (ix, 244, 281–2 *bis*,

[1] The historian records a presentment on the part of a sister of Saif al-Daula, who, surveying the Maidān with some 20,000 horsemen thereon from one of the city towers, exclaimed that it might well happen that the race of Ḥamdān would pass away:

يوشك ان تقوم الساعة على آل حمدان

And within sixty or seventy years there was not one of the race remaining (fol. 116*b*). A prediction of misfortune to come was also made to the Amīr's successor, see *infra*, p. 145, n. 2.

and 305); his quarrels with the Oqailids of Mosul (ib., 249, 257, 280, and 375), one, late in his reign, occasioned by the murder of his son Sulaimān[1] at Jazīra (ib., 416); his quarrels with the Greeks and the Sunāsuna tribe (ib., 301–2 and 306); and his successful appeal to Ṭughril Beg in 441 to allow the ransom of Liparit,[2] the king of the Abkhāz, who had been captured the year before by Ṭughril's brother Ibrāhīm Yanāl, and who was thereupon generously set at liberty without a ransom (ib., 372, 380).

Ibn al-Athīr relates too that he sent cooks to Egypt to learn their art, and that he forbad catching the birds which came down from the hills in winter, providing them with grain from the granaries. Dhahabi too, in his notice of Ibn Jahīr in the Ta'rīkh al-Islām (Or. 50, 188*b*), gives an interesting anecdote of the Amīr on the authority of al-Ḥumaidi (Brock., Gesch. Arab. Lit., i, 338), who derived it from the historian Ghars al-Ni'ma Muḥammad (the son of Hilāl al-Ṣābi), who, in turn, was told it by Ibn Jahīr. The Amīr offered a Kurdish freedman of his a roast partridge, at which the man laughed, and, when the Amīr insisted on knowing the cause, said that it had reminded him of a merchant whom in his youth he had robbed, and, in spite of his entreaties, had killed. The victim, seeing he was doomed, appealed to two partridges to testify to his unjust fate. And the partridge had reminded him of this foolish appeal. At this the Amīr was convulsed with laughter, and told him that the partridge had indeed borne witness, and moreover before one who would bring him to account. And he had him put to death forthwith. Ibn Jahīr added that, strangely enough, the same story, word for word, was to be found in the Kitāb al-Nishwān of al-Tanūkhi.[3] The scribe

[1] I can find no mention of this son in the MSS.

[2] In Ibn al-Athīr (ix, 372) the name is written قاربط, and in one MS. فاربط. An account of this Saljuq invasion of Armenia under Ibrāhīm in 1048 A.D. will be found in Brosset's "Histoire de la Géorgie," vol. i, add. pp. 222–226.

[3] Died 384 A.H. (Brock., Gesch. Arab. Lit., i, 155, and Ibn Khallikān, Sl. Eng., ii, 564). There is a MS. of this work in Paris, No. 3,482, but I was unable to find this story therein.

adds a note that he had read in a work called the Kitāb al-Imtinā' wal-Mu'ānasa a story of a philosopher who was waylaid and murdered by thieves on his way to an assemblage of the learned, and who had adjured some birds—but whether partridges or not he could not say for certain—to acquaint the assemblage of his fate. The thieves attended the gathering, and whilst there saw the birds, whereupon one said to the other: "Do you think these are the birds come to announce the murder?" He was overheard; they were brought before the king, confessed, and were executed. This story is evidently the Greek tale contained in the Anthology and popularized by Schiller's lay "Die Kraniche des Ibykus."[1]

Niẓām al-Dīn Abu'l-Qāsim Naṣr, 453–472 A.H.

His ability caused him to be designated as successor by his father in preference to his elder brother Sa'īd, and he was now peaceably acknowledged as Amīr by his kindred and subjects. But Sa'īd soon gave trouble. He sought the protection of the Sultan, Ṭughril Beg, who in 455 sent to his aid a body of troops who encamped outside Mayyāfāriqīn. But Ibn Jahīr told Sa'īd plainly that he was not the man to overthrow a sovereign, and he was induced to accept a territorial grant, whilst the troops retired on receiving 50,000 dinars (fol. 143*a*). Still, Sa'īd was not satisfied, and the vizier advised his being given Āmid as a residence.[2] On his way there he visited his brother at Mayyāfāriqīn, and as they were sleeping in the private apartments Sa'īd was roused by a slave of his who suggested he should kill the Amīr and usurp his place. But Sa'īd asked indignantly whether his brother, the son of a slave girl, should keep faith, whilst he,

[1] The story of Ibycus is told by Ælian in his "Various History," where the birds appealed to are said to have been crows. See Encycl. Metrop., 1845, Hist. and Biogr., i, 260. There is also a Persian version (see the forty-sixth story in the Kitāb-i-Ṣad Ḥikāyāt, Bombay, 1881), where the victim is a Ḥākim named Inkash (qy. Ibkush, i.e. Ibykus) under Firdaus, king of Greece, and the birds are vultures.

[2] What follows of the story has got transposed in Or. 5,803 to fol. 145*a*. It should follow on here, as it does in Or. 6,310, 59*b*.

descended from Faḍlūn, should play the traitor, and the brothers parted in amity. Soon, however, the Amīr regretted Āmid, and having procured an attractive slave girl as a gift to his brother, he tempted her, by a promise of marriage, to give Sa'īd, when they were alone together, a handkerchief.[1] She did this, and within three days he was dead. The Amīr at once seized Āmid, married himself Sa'īd's murderess, and married his widow to his own son and successor, Manṣūr (fols. 145*a*–*b*).[2] The Amīr was now to lose the services of Ibn Jahīr. In 455 the Caliph al-Qā'im applied to have him as his vizier, and he was sent off by his master with great marks of honour to take up the post;[3] and the historian mentions the elation of the people at the thought of the eminence attained by their two viziers al-Maghribi and Ibn Jahīr. His successor was Abu'l-Faḍl Ibrāhīm b. 'Abd al-Karīm al-Anbāri, who had been in the service of Qirwāsh at Mosul (fol. 143*b*). He died in 458, and was succeeded by his son Abu Ṭāhir Salāma 'Ain al-Kufāh, who, though young, proved competent (fol. 144*a*). His life will be traced to its tragic close.

In this same year Diyār Bakr was attacked by an emissary from Ṭughril Beg,[4] one Sallār Khurāsāni, who encamped

[1] The episode breaks off here in Or. 1,583, 145*b*; the continuation is supplied from the earlier version, fols. 60*a*–*b*, and from Bodl. Marsh 333, 90*a*.

[2] Sa'īd died in 455 (Ibn al-Athīr, x, 19). Sibṭ ibn al-Jauzi (Paris, 1,506, 89*b*) says that on his death the people at Āmid wished his infant son to succeed, and the Qāḍi Ibn al-Baghl (who had lately ceased to be Qāḍi of Mayyāfāriqīn, Or. 5,803, 143*b*) sought the aid of the Ghuzz against the Amīr. But the latter gained the day by offering marriage to the infant's mother, and the Qāḍi was arrested and fined.

[3] All the other accounts describe Ibn Jahīr's promotion as due to his own efforts, and his departure as effected by stealth, and in concert with the Caliph's envoy, whom he affected to be speeding homewards: see Bundari's Abridgment of 'Imād al-Dīn al-Iṣfahāni, ed. Houtsma, ii, 24; Ibn al-Athīr, x, 14; Ibn Khallikān, Sl. Eng., iii, 280; and Dhahabi, Or. 50, 188*a*–*b*. Their accounts are possibly all derived from al-Hamadhāni's history (see note *ante*, p. 137, n. 2). Dhahabi suggests that his departure was brought about by hostility between the Amīr and his brothers Sa'īd and Abu'l-Fawāris. As to the latter, the MS. mentions no brother of this name. One, named Ibrāhīm, had a son named Abu'l-Fawāris (fol. 155*b*).

[4] This must be an error, as Ṭughril Beg died in 455, but the MS. gives 459 as the date of his death (144*a*). The dates of the Saljuq Sultans as given by Ibn al-Azraq often differ from those given elsewhere, as is pointed out more than once by Ibn Khallikān. Moreover, in Or. 5,803, the attack by Sallār is inserted before the death of Abu'l-Faḍl al-Anbāri, whereas in Or. 6,310, 61*b*, it is made to occur when his son Abu Ṭāhir was already vizier.

outside Mayyāfāriqīn with 5,000 horse and began making raids. The vizier promised him money if he departed, and sent him as hostage al-Ḥasan, brother to the Amīr. Sallār then approached the city gate, but when about to enter held back in doubt. The vizier, perceiving this, at once ordered two more of the Amīr's brothers, Faḍlūn and Māmak, to be handed over. This reassured Sallār, and he proceeded to the palace. The vizier advised the Amīr to make him a prisoner, and disposed of his misgivings as to his brothers' fate by telling him that they were his foes, and might well serve as the price of Diyār Bakr. The Amīr inclined towards paying the agreed sum, but the vizier said this would open the door to other such claims. So Sallār was seized, exclaiming he was betrayed, whereupon his troops pillaged his tent, beheaded two of the Amīr's brothers, and tied the third (Faḍlūn) to the tail of an untamed colt, whom they turned loose. After running for two days the animal was stopped by a peasant, and Faḍlūn was brought home and cured.[1] Sallār and his men were executed, and the body of al-Ḥasan received a solemn burial (fols. 143*b*–144*a*).

The visit to the city of the vizier Niẓām al-Mulk is next related (fol. 144*a*). He came on the occasion of Alp Arslān's campaign against the Greeks in 463 A.H. The Amīr was alarmed; he entertained the vizier sumptuously; and two of his sisters and his wife implored the good offices of their powerful guest, who assured them that he would turn their brother "from an Amīr into a Sultan." The Amīr was, in fact, received by Alp Arslān with much favour on his attending him with costly gifts, and Niẓām al-Mulk, referring to his promise, said there could be but one Sultan, but that he should be "Sulṭān al-Umarā," and he was given that title (Or. 6,310, 63*a*–*b*).[2]

[1] This incident anticipates the story of Mazeppa.

[2] In Or. 5,803, 144*b*, Sa'īd is made to accompany the Sultan, who hesitates to give effect to his vizier's promises because of his word given to Sa'īd. The vizier said that if the Sultan would go out hunting he would arrange matters. Sa'īd was arrested, and on his resisting was bound with a chain and carried on a mule to al-Ḥattākh. As above stated, the narrative of Sa'īd's death follows later, and is not brought to a conclusion. The MS. adds that the Amīr was in great straits for money until supplied by his sister Zubaida. Sibṭ ibn al-Jauzi

The story of Alp Arslān's victory over the Greek Emperor Romanos follows.[1] One of its results was the enriching of Akhlāṭ from the booty taken; and we are told that this town, with Manāzjird, ceased from henceforth to be subject to the Marwānids, being treated as fiefs by the Sultan (fol. 145*b*).

The remainder of the Amīr's reign was uneventful. Some public works of his are recorded, amongst them a bridge over the Dujaila river at Āmid. He died in 472 A.H., as predicted by a Baghdād astrologer,[2] and is described as a mild and just sovereign, under whose rule Mayyāfāriqīn attained to a high pitch of prosperity. By the care of the vizier, al-Anbāri, the succession passed peaceably to his eldest son (fols. 146*a–b*).

(Paris, 1,506, 126*b*) mentions the Amīr's fear at the Sultan's arrival, and his gifts which he had wrung from his subjects, and which the Sultan returned, saying "he did not want the peasants' money." See also Ibn al-Athīr, x, 43. Dhahabi, in the Ta'rīkh al-Islām (B.M. Or. 50, 98*a*), mentions the Sultan's visit in 463, and the Amīr's gift of 100,000 dinars, on the authority of a certain "'Abd al-Wāḥid b. al-Ḥusain" (*sic*).

[1] The following anecdote I have not met elsewhere. Ibn Mahlabān, who had come as envoy from the Sultan, being asked by the Greek Emperor which was the pleasanter of Iṣfahān or Hamadhān, answered the former, as Hamadhān was very cold. Then, said the Emperor, we shall winter ourselves at Iṣfahān and our beasts at Hamadhān. The envoy replied that the beasts would indeed do this, but as for them he felt less certain. The mission of Ibn Mahlabān is mentioned by Sibṭ ibn al-Jauzi (Paris, 1,506, 129*b*). He says the Emperor had distributed among the patricians, in anticipation of victory, fiefs situate in Egypt, Syria, Khurāsān, and 'Irāq, reserving Baghdād for himself, and that he meant to pass the Winter in 'Irāq and the Summer in 'Ajam. His account of the battle is very full, covering four folios, and is based in part on the history of Abu Ya'la ibn al-Qalānisi (al-'Amīd Hamza b. Asad), author of a continuation of the history of Damascus, of which an imperfect copy at Oxford—Bodl. Hunt. 125—covering 362–555 A.H., gives a brief account of the battle, and also of a General History in continuation of that by Hilāl al-Ṣābi, i.e. from 447 A.H. onwards (see Ibn Khallikān, Sl. Eng., iv, 484).

[2] This astrologer, Ibn 'Ayshūn, was ten years in the Amīr's service. One moonlight night, as they were admiring the prospect of the city and its gardens, he predicted that after the Marwānid dynasty had passed away it would be desolate and oppressed for over eighty years; and this happened, for it was taken by the Turks, passed from one governor to another, and was greatly oppressed. To this day, says the historian (572 A.H.), it is not what it was under Nizām al-Dīn (fols. 147*a–b*).

Nāṣir al-Daula Abu'l-Muẓaffar Manṣūr, 472–478 A.H.

For a time the government was ably conducted by the vizier, who bore the title of Za'īm al-Daula 'Amīd al-Mulk, but soon the Amīr took into his favour a physician named Abu Sālim, whose wife was equally in favour with his consort, Sitt al-Nās, and this couple procured the arrest and imprisonment of the vizier, and took his place. This sole recorded political act of the Amīr proved fatal to the dynasty, for Ibn Jahīr, who since his dismissal by the Caliph had been in the service of Niẓām al-Mulk, on hearing of what was going on at Mayyāfāriqīn, conferred with Niẓām al-Mulk, and advised him to seize the Marwānid territory and treasures. He in turn gave similar advice to his master Malik Shāh, and in the result troops were sent in 477 A.H. against Diyār Bakr under Ibn Jahīr. He advanced on Mayyāfāriqīn, leaving his son Abu'l-Qāsim Za'īm al-Daula to attack Āmid. The Amīr, leaving Abu Sālim in charge of the capital, retired to Jazīra. The invader wintered at Qal'at Is'ird, and in 488 renewed his attack on Mayyāfāriqīn, aided by reinforcements which had arrived under Ortoq,[1] the ancestor of the future rulers of the district. But at the Sultan's Court voices were being raised on behalf of the Amīr, and a partition was proposed under which he was to retain Mayyāfāriqīn and Āmid, and the Sultan to have Jazīra, the remaining territory being divided between them according to the Amīr's selection. He asked time for reflection. Next day came a message from Abu Sālim telling him to be under no anxiety, as they could hold out for ten years, the place being strong and the inhabitants

[1] On his way Ortoq had attacked the Oqailid Muslim (whose aid Nāṣir al-Daula had purchased by the cession of Āmid), and had defeated his Arab force near that town (Ibn al-Athīr, x, 86). Two passages in Or. 5,803 (fol. 145, 466 A.H., and 146*b*, 472 A.H.) seem to refer to this event, but the Oqailid is there wrongly called Qirwāsh. Muslim's defeat is mentioned by Ibn al-'Adīm (Paris, 1,666, 106*a*) and by Sibṭ ibn al-Jauzi (Paris, 1,506, 183*b*), who says that Ibn Jahīr and Ortoq quarrelled over the latter's treatment of Muslim; as to which see also Ibn al-Athīr, loc. cit.

resolute.[1] Thus encouraged the Amīr rejected the Sultan's offer. An adviser such as Abu Sālim, says the historian, was bound to bring a dynasty to perdition (fols. 147*b*–148*a*). And the end was at hand. Reinforcements arrived from the Sultan under al-Kūhiyāri,[2] so skilled in the use of the bow that no one dared show himself on the wall; then one of the forts fell, and in Jumāda I, 478, the city submitted. It was pillaged, the Marwānid treasure seized, and Abu Sālim made prisoner. Āmid had in the meantime fallen to Ibn Jahīr's son Za'īm al-Daula, and the whole of Diyār Bakr submitted to Ibn Jahīr.[3] He now sent home all the troops except 300 horse, who remained under the Amīr Jabuq, on whom was conferred the fief of Ḥuṣn Ziyād, viz. Khartapirt.[4]

[1] The letter also urged on the Amīr not to give up to Diyār Rabī'a the fortress of معرين (Or. 6,310, 69*b*, مهرين), which Naṣr al-Daula had always refused to give up to Qirwāsh, saying it was the bar (حد) between Diyār Bakr and Diyār Rabī'a. It were preferable to surrender the fortress of Bālūsā, which lay on their boundary (تخم) at the head of the Hirmās river (which flowed past Naṣībīn). These two fortresses do not seem to be noticed by the Arab geographers.

[2] This name is variously spelt in the two MSS., and in Bodl. Marsh 333, but Sibṭ ibn al-Jauzi (Paris, 1,506, 189*a*) calls him Sa'd al-Daula, and he is therefore probably identical with Kūharā'īn, the officer whose slave captured the Emperor in the victory of 463 (Ibn al-Athīr, x, 44) and who died in 493 (ib., 200). This spelling of the name is confirmed by the fine fourteenth-century MS. of Saljuq history, the Zubdat al-Tawārīkh, B.M. Stowe Or. 7, fol. 30*a*, and by Bundāri, op. cit.

[3] Sibṭ ibn al-Jauzi (Paris, 1,506, 188*b*) attributes the surrender of Āmid to the Christians having forced up the price of grain during the siege, whereupon the Moslems rose and admitted the besiegers. As regards Mayyāfāriqīn (ib., 189*a*), he says that the siege dragged owing to a certain chamberlain, who was with Ibn Jahīr as resident agent (Shiḥna) of the district, taking bribes from the inhabitants. On his death this was discovered, whereupon the besiegers attacked resolutely and the place fell.

[4] In 489 Jabuq was in the service of Tutush, who compelled his sister to surrender Abu Ṭāhir al-Anbāri, who had fled to Khartapirt, by threatening to kill her brother (fol. 153*a*). Jabuq must have died before 500, for in that year his son Muḥammad is called by Ibn al-Athīr the owner of the town. He says that it belonged to a Greek named Apollidorus (افلادروس), who after the invasion of Ibn Jahīr was unable to hold it, and it was taken by Jabuq. And he tells a story how Jabuq and the Greek lord of a neighbouring stronghold aided each other in highway robbery. This begat mutual confidence, and Jabuq sent to ask some of his friend's men to meet him; these he bound and

The Amīr, who was at the Sultan's Court, heard the news of his downfall with indignation; the historian regards it as the natural result of his misguided obstinacy, highly unfitting in one so young. Asked what he would like as compensation, he ejaculated that the dart (Ḥarba) had pierced him through and through. Thereupon the Sultan was told that he was asking for Ḥarba, a place situate in Irāq above Baghdād, and producing a rental of 30,000 Amīriyya dinars, and there the Amīr abode until the death of Malik Shāh (fol. 148*b*).

Ibn Jahīr now proceeded to remove the traces of the siege. The late vizier, Ibn al-Anbāri, was set at liberty and sent to Ḥuṣn Kayfā, where one Yāqūt was governor, and the historian's grandfather, 'Ali b. al-Azraq, was Nāẓir. But Ibn Jahīr reflected that the vizier must have a full knowledge of the Marwānid treasure, and might make inconvenient disclosures to the Court, and he accordingly sent an order for his death. Yāqūt and 'Ali, however, devised a scheme by which Ibn al-Anbāri pretended illness and was declared to have died. A funeral followed, and a duly attested declaration of his death (محضر) was drawn up, which found credit everywhere, and he was kept in concealment until Ibn Jahīr had left the country. The latter now proceeded to seize the Marwānid treasure, and various costly objects are specified by the historian as having been shown to his grandfather by Ibn Jahīr, who explained to him how they had been the cause of the fall of the dynasty. For on the death of Naṣr al-Daula a certain string of pearls and a sword had been claimed, first by Alp Arslān and then by Malik Shāh, and in vain. But Ibn Jahīr said that on the second occasion he spoke strongly

conveyed to the stronghold, where he threatened to kill them unless it and its master were surrendered to him. Those within yielded and opened the gates. Jabuq then flayed his friend and seized his goods (x, 296). Jabuq's successors were deprived of Khartapirt by Nūr al-Daula Būlak b. Bahrām b. Ortoq, who held it against the Franks' attack in 517 A.H. (ib., p. 433). He was ousted by his cousin Shams al-Daula Sulaimān b. Īl Ghāzi during his rule at Mayyāfāriqīn, 516–518 A.H., and on his death it passed to the Ortoqid Da'ūd o Ḥuṣn Kayfā. In Ibn al-Azraq's time it was still the abode of many of Jabuq's descendants (Or. 5,803, 162*b* and 177*a*).

to Niẓām al-Mulk, and the expedition was decided on. Asked the value of the treasure, he said that whilst he was vizier to Naṣr al-Daula forty-five single pearls were procured at a cost of 65,000 dinars, and that the whole, exclusive of the Buwaihid gem, represented 215,000 dinars. 'Ali b. al-Azraq conveyed the treasure to Ḥuṣn Kayfā, and then handed it over to a member of the Abu'l-'Aqārib family of Mosul,[1] who conveyed it to 'Amīd al-Daula at Baghdād. In all Ibn Jahīr got in property to the value of one million dinars, and valuables besides. In two years time he was recalled.[2] He meditated revolt, but felt it was not feasible as his son 'Amīd al-Daula was vizier to the Caliph, so he remained quiescent[3] and returned to the Sultan's Court (fol. 149*b*).

He was succeeded in Diyār Bakr by al-'Amīd Qawām al-Mulk Abu 'Ali al-Balkhi, whose excellent rule recalled the days of Niẓām al-Dīn. His only recorded act, however, is the arbitrary conversion of a Nestorian monastery into a mosque in spite of an offer of 50,000 dinars by the Christians if he would desist.[4] (It was said that a similar project on the part of Ibn Jahīr with regard to this monastery had been averted by a sum of 30,000 dinars.)

The rule of Ibn Jahīr was generally regretted, and a complaint by the people of Arzan against an oppressive governor put over them by Abu 'Ali was the occasion of a deputation of leading persons, including the historian's grandfather, proceeding to the Sultan's Court to procure Abu 'Ali's removal. At first the Sultan refused. But one of the deputies, in an audience with Niẓām al-Mulk, whilst admitting the competency of Abu 'Ali, urged that his unpopularity was a source of danger, having regard to their proximity to the Sunāsuna tribe, and the minister seized the pretext of a dispute in the palace between two of the deputies which reached the Sultan's ears, to tell him that

[1] See note *ante*, p. 136.

[2] In 479 (Ibn al-Athīr, x, 105).

[3] بقى يفاسح. This third form is not given in the dictionaries.

[4] See J.R.A.S., 1902, p. 792, n. 1, where the date 580 should be read 480.

the disputants were men from Diyār Bakr exclaiming against Abu 'Ali. Then, said the Sultan, let him be removed. The vacant office was conferred by Niẓām al-Mulk on Abu Ṭāhir al-Anbāri, whose brother, al-Sadīd Abu'l-Ghanā'im, had recently petitioned for his release, asserting that he was, in fact, alive and in prison at Ḥuṣn Kayfā. And he procured his removal thence to Iṣpahān. Abu Ṭāhir now prepared to take up his appointment, but in the meantime 'Amīd al-Daula, the son of Ibn Jahīr, offered to guarantee a revenue of one million dinars for three years' tenure of the office. It was accordingly conferred on him, and the deputation were told to travel home in his company. At this point we are given an example of a really popular wish and of its practical outcome. The party were given an allowance, presumably for the expense of their journey, of 10,000 dirhams, of which 4,000 were for the natives of Mayyāfāriqīn. They, however, being well assured that only the chiefs and the persons of importance would get any of the money, decided to ask the Sultan to remit instead the مؤنة الغريب و البلدى, an impost levied on the gardens and vines near the city, on the fruit and vegetable produce, as also on coal and wood. Such a concession (عطا) would benefit all classes alike. Their request was granted, and this new system still prevailed in the author's time throughout Diyār Bakr, Āmid, and Jazīra, whereas elsewhere remissions of taxation continued to benefit only the great (fol. 150*a*).

Late in the year 482 'Amīd al-Daula arrived in Mayyāfāriqīn, and proved himself to be a good and beneficent governor: اعطاهم المعايش والاعمال.[1] He at once set about getting in the various sums on deposit in the district which belonged to his father, and we are told that to be enabled to do this was his sole object in procuring the post of governor.[2]

[1] I take this to mean "he procured them means of livelihood and industries."

[2] It would be interesting to know, not so much whether this was in fact so, but whether it was regarded as probable, and whether in the unchangeable East it would still be so regarded. A late Viceroy of India was preceded in that office, at a generation's interval, by his father. And a friend in practice at the Madras

His father, in the meantime, was engaged in bringing Diyār Rabī'a under obedience to the Sultan, who had named him governor there. He died at Mosul in 483. Late in 484 his son returned to the Sultan's Court at Iṣfahān, and was soon reappointed vizier to the Caliph Muqtadi. He had left in his place his youngest brother, Kāfi al-Daula Abu'l-Barakāt Juhayyir, but in a few months he too was recalled, and left behind his son Abu'l-Ḥasan. In this year, 485, occurred the death of Malik Shāh, which was caused, we are told here, by poison (fol. 151*a*). The arrival of the news caused much excitement at Mayyāfāriqīn. Abu'l-Ḥasan at once quitted the residence,[1] and the people sent a letter to Barkiyārūq protesting their allegiance and asking him to come in person or send someone in his stead. But he was occupied with other matters, and the people, after deliberation, chose the Qāḍi Abu Sālim Yaḥya b. al-Ḥasan b. al-Majūr, a man of great weight among them, to reside in the palace and govern on the Sultan's behalf. He refused, but they insisted, and forced the city keys on him. Time went on; neither Sultan nor deputy arrived, and at length a party raised their voice for the Marwānid Nāṣir al-Daula Manṣūr, who had left Ḥarba and advanced towards Jazīra. Some rejoiced at this, but others, mindful of the beneficent rule of the Sultan and of Ibn Jahīr, regretted it, and with the city and walls patrolled by the rabble under the leadership of a local poet, Abu Naṣr Ibn Asad, and no sign from the Sultan, an offer of allegiance was sent to his uncle and rival Tutush b. Alp Arslān, already master of the country as far as Naṣībīn, which he entertained favourably (fol. 151*b*). In the interval the Marwānid Manṣūr gained over Ibn Asad, who, in the absence of all the leading inhabitants, handed over the city to him and was named his vizier. But Tutush had now reached Āmid. On his advance Mayyāfāriqīn surrendered

Bar has told me that the people there readily explained the presence of the German Emperor at the funeral of Her late Majesty for reasons based on the descent, amongst themselves, of property through the female line, equally with the male.

[1] The historian says he saw him at Baghdād in 534, and that he was tall and dark-complexioned with a thin beard, and showed signs of age.

to him in Rabī' I, 486, and Manṣūr took refuge in the tent of his adversary's vizier, Abu'l-Munajjim, after five months' rule. Tutush was clement, remitting taxes,[1] and conferring favours on the leading inhabitants. To both Kāfi al-Daula, the son of Ibn Jahīr, and to the late vizier, Abu Ṭāhir b. al-Anbāri, he sent offers of office, and the former arriving first, was appointed vizier, Ibn al-Anbāri being put in charge of Mayyāfāriqīn, and the Mamlūk Ṭughtigīn[2] being appointed to reside in the palace. Tutush now moved to Ḥarrān, accompanied by Būzān of al-Ruhā and Āq Sunqur of Ḥalab, on his way to encounter Barkiyārūq. At Ḥarrān Ibn Asad, who had been in hiding, approached him with a laudatory ode (one line of which is quoted). One of those present told Tutush who he was, and he was beheaded. This was in 487. In 488 a revolt at Āmid against Ṭughtigīn's deputy was severely repressed. Henceforth this town became politically separate from Mayyāfāriqīn, passing from Tutush's son to the Turkoman Yanāl, and then to his son Fakhr al-Daula Ibrāhīm[3] (fols. 152–153). The fate of Ibn Asad had roused the alarm of Ibn al-Anbāri at Mayyāfāriqīn, and he fled with his two sons and his nephew, the son of his brother

[1] The words are (fol. 152*b*):

اسقط عنهم المؤن والاعشار والاقساط والكُلَف وجميع البوايق

Sukman al-Quṭbi, of Akhlāṭ, also remitted taxes when he acquired Mayyāfāriqīn in 502 A.H. The terms used are similar, with the addition (fol. 158*b*):

واسقط دار الضرب و اطلق الحشر للسور

Or. 6,310 has (fol. 97*b*) الحشرى. And the Ortoqid Najm al-Dīn Īl Ghāzi acted likewise in 512 A.H. (fol. 161*a*):

ازال عنهم الاثقال والاقساط وانزال من دورهم

i.e. the quartering of troops, in Or. 6,310, fol. 101*b*, وزال النزل.

[2] The first of the line of Atābegs of Damascus; died in 522 (Ibn al-Athīr, x, 459).

[3] In Or. 6,310, 95*b*, which is followed by Ibn Shaddād (op. cit., 121*b*), Āmid is said to have passed, on the death of Tutush, to the Amīr Ṣādar, then to his brother Yanāl, then to Fakhr al-Daula Ibrāhīm, then to his son Sa'd al-Daula Ildari (died 536), and then to his son Jamāl al-Dīn Maḥmūd, who was still reigning in 560 A.H., the date of the work. Ibn al-Athīr (x, 296) says that Āmid was granted to Ibrāhīm by Tutush when he seized Diyār Bakr.

Abu'l-Ghanā'im, to the fortress of al-Hattākh, his brother, who remained behind, being arrested by Ṭughtigīn. Thence he fled to Ḥuṣn Ziyād, whose owner, Jabuq (*ante*, p. 147, n. 4), was in Tutush's camp, and he, by threatening to kill Jabuq, forced his sister to hand over the fugitive and his eldest son to him at Shimshāṭ, near Malaṭīyya, where he had them both executed in Jumāda II, 489. Their heads were sent to Mayyāfāriqīn, where Abu'l-Ghanā'im was also executed, after refusing the offer of a cup of water so that he might die fasting. And for some time a light was observed at night-time on their grave.[1] The surviving son and nephew were conveyed to Baghdād, where the latter, Sadīd al-Daula Muḥammad b. 'Abd al-Karīm al-Anbāri, attained to high official rank in the service of the Caliphate (see J.R.A.S., 1902, p. 788). In 492 he had his relatives' remains conveyed to Baghdād and buried near the shrine of the Straw Gate in the Quraish cemetery near the two Imāms.[2] It was from him that the historian, when at Baghdād in 534 A.H., derived his information about their fate.

Tutush, in the meantime, having been compelled to retire before the army of Barkiyārūq owing to the defection of Būzān and Āq Sunqur, had returned to Syria (see Ibn al-Athīr, x, 151), where in the following year, 487, he wreaked his vengeance on them both (ib., 157). But within a year (ib., 157) he was himself killed in battle with Barkiyārūq at the gate of al-Rayy, and by the hand of one of Būzān's Mamluks.[3] The death of the last ruler of the Marwānid dynasty soon followed. Manṣūr died at Jazīra in 489, according to Ibn al-Athir (x, 184), though the date given in

[1] Whilst giving due weight to this phenomenon, it is permissible to remember that it was by the advice of this vizier, Ibn al-Anbāri, that Niẓām al-Dīn entrapped his enemy, at the cost of the life of his brothers who had gone hostage for his word. See *ante*, p. 144.

[2] See "Baghdad during the Abbasid Caliphate," by G. Le Strange, p. 160.

[3] In the text Tutush is reported as saying to his prisoners: "I have done you no injury: I had Damascus, and you two had al-Ruhā and Ḥalab." In Ibn al-Athīr, as also in the biography of Āq Sunqur given by Ibn al-'Adīm in the Bughyat al-Ṭalab (Recueil Hist. Crois. Or., iii, 709), the dialogue is between Tutush and Āq Sunqur only; the latter admits he would if victorious have killed his adversary, and is told that he has pronounced his own doom. And Tutush is said to have been killed by a mamlūk of Āq Sunqur (see vol. x, 151, 157, 166–7).

Or. 5,803, 154*a*, and also in Or. 6,310, 83*b*, is 486. He was buried by his wife, the daughter of his uncle Sa'īd, at Āmid, at a spot overlooking the Tigris.[1] The Marwānid dynasty had ruled from 380 down to the invasion of Ibn Jahīr in 479, and the historian calculates that Manṣūr's five months rule in 486 completed the century.

But though the dynasty had passed away the stock was far from exhausted. No descendants of Manṣūr are mentioned,[2] but his brothers and uncles left issue, and there were also lines of cousins descended from Kaka b. Marwān, no doubt the fourth son of Marwān, whose name was omitted on fol. 122*a* (see p. 124). Their pedigrees are deduced by the historian (fols. 154–156); of some of them he gives particulars,[3] and it is probable that at his date (572 A.H.) and long afterwards there were many who traced their descent from the aged couple whom we left spending their closing days at Arzan beside their murdered sons' grave.

[1] Ibn al-Aṯīr says that he had been seized by Jaqarmiš, the ruler of Jazīra ibn 'Omar, and that he died there in the house of a Jew. He says, too, that Manṣūr was noted for his avarice (vol. x, 174).

[2] Ibn al-Aṯīr mentions a son of his as accompanying the Turkoman Mūsa from Ḥuṣn Kayfā to Mosul in 495 (vol. x, 235).

[3] One of them, Aḥmad b. Niẓām al-Dīn, was, he says, skilled in horses, and the composer of well-known Maqāmāt. Whilst serving the Sultan Muḥammad at Mosul he fell a prisoner to the Franks. During his captivity he had a son born to him, Muḥammad al-Afrangi. On regaining his liberty he became ruler of Ṭanzah, and later of al-Hattāḵh, which he seized during the weak government of al-Ruzbaki at Mayyāfāriqīn, 516–518 A.H. (fol. 160*a*), and had other sons born to him. One day arrived his son Muḥammad with a token of identity which his mother had given him on attaining manhood, telling him who his father was. Later, an outburst of anger on the part of Aḥmad caused Muḥammad to wander away outside the place, and he was no more heard of. He had two sons who in the author's time were in the service of the Ortoqid ruler of Māridīn. Of Aḥmad's other sons, Bahrām, in 528, managed to oust his father, who then went and took service under Ḥusām al-Dīn Timurtāš, the Ortoqid ruler of Māridīn. In 529 Bahrām was supplanted by a brother, 'Īsa, whereupon Aḥmad claimed to have al-Hattāḵh restored to himself, and on 'Īsa refusing, he made it over to Ḥusām al-Dīn, who, in 530, attacked and took it. 'Īsa removed to Āmid and entered the service of the Ortoqid of Ḥuṣn Kayfā, where he was still living in 572 (fols. 154*b*–155*a*). The capture of al-Hattāḵh is recorded also on fol. 168*a*, under 530. Ibn al-Aṯīr (xi, 43) mentions its capture in 532 as marking the disappearance of the last vestige of Marwānid rule.

ART. VI.—*The First Part of the "Natījatu'l Taḥqīq" by Abū 'Abdu'llah Muḥammad al Dilā'ī* (†1089 A.H.). Translated from the Text lithographed at Fez in the year 1309 A.H., by T. H. WEIR, B.D., M.R.A.S., Assistant to Professor of Hebrew and Semitic Languages in the University of Glasgow.

IN the name of God the Merciful and Compassionate, and may God bless our lord Muḥammad and his family and his companions, and give them peace.

Praise be to God and peace upon the servants whom He has chosen, and especially upon our lord Muḥammad—may God bless him and give him peace—the midmost pearl of that necklace—and his noble family.

To proceed: This is a gleaning of one in haste, and an utterance of one who sighs, and a precious gift of brothers, and an assuaging of griefs. I have in it done service to the shaikh of shaikhs, and the chief of chief men, and the pole-star of pole-stars, and their full moon which arose over Jīlān, clinging to the hem of his garments, as much as lieth in me, feeling, through love of him, a breath of the breaths of the Merciful, imitating the saying of him who said in the times that are past:—

"A lapwing came to Solomon upon the day of assembly,
Bringing him a locust which she carried in her beak,
And recited, as befitted the occasion, saying:
'Verily, gifts are according to the means of those who give them.
If to every one were given what he is worthy of,
Thou wert worthy of the world and what is in it.'"

And it contains somewhat of that which concerns him, next what concerns some of his descendants, gleaned from the

mines thereof and its reliable sources, on which he who knows shuts fast his hand. And from God—praise be to Him—come succour and success.

The First Part.

The Shaikh—whom may God accept, and bless us in him: He is Muḥyī al Dīn Abū Muḥammad 'Abdu'l Qādir, son of Abū Ṣāliḥ Mūsā, son of 'Abdu'llah, son of Yaḥyā'l Zāhid, son of Muḥammad, son of Dāwūd, son of Mūsā, son of 'Abdu'llah Abū'l Kirām, son of Mūsā'l Jaun, son of 'Abdu'llah al Kāmil, son of Al Ḥasanu'l Muthannā, son of Al Ḥasanu'l Sibṭ, son of 'Alī and Fāṭimah—may God accept them all. Thus between him and the "bit[1] of the Apostle" of God—may God bless him and give him peace—are eleven ancestors. Those, both historians and others, who have transmitted the column of this genealogy, are agreed that it is as we have given it, and precisely as we have delineated it. Such are the ḥāfiẓ Shamsu'l Dīni'l Dhahabī in his great History which notices all the chief men, and Sibṭ Ibnu'l Jauzī in the "Mir'ātu'l Zamān," and Al Shaṭṭanaufī in his "Bahjah," and Ibn Ḥajar in his "Ghibṭah," and others of the chief imāms to whom recourse is had on this subject.

The Shaikh's father Mūsā is described as being *jankī duwust*. This epithet is applied to him by the Shaikh, the imām Musnadu'l Sha'm Abū'l Ḥasan 'Alī ibn Aḥmad ibn 'Abdi'l Wāhidi'l Maqdisi, in his "Mashyakhah," when he mentions his own shaikh, the Shaikh 'Abdu'l Razzāq, son of the Shaikh Saiyidī 'Abdu'l Qādir. It is also applied to him by Al Shaṭṭanaufī in his "Bahjah," and by the author of the "Rauḍu'l Nāḍir." The term in the dialect of the people of that quarter of Persia means "mighty in power."

'Abdu'llah, the son of Mūsā, whose *kunyah* is Abū'l Kirām, also bore the *laqab* Al Riḍā. He it was whom the 'Abbāsid Al Ma'mūn, the son of Hārūnu'l Rashīd, wished to put in place of his cousin 'Alī ibn Mūsā'l Ḥusainī, who was also

[1] Referring to Muḥammad's saying: "Fāṭimah is a bit of me; what vexes me vexes her, and what hurts me hurts her."

called Al Riḍā, on the death of the latter, whom Al Ma'mūn had designated for the Khalifate; but 'Abdu'llah declined and would not have it. So says Al Azwārqāni. His mother was Umm Salimah, daughter of Muḥammad, son of Talḥah, son of 'Abdu'llah, son of 'Abdu'l Raḥmān, son of Abū Bakr al Ṣiddīq—may God accept them; so that all his descendants are descended from Al Ṣiddīq. His father Mūsā bore the *laqab* Al Jaun, because he was of a ruddy colour, although he was not the son of a slave-girl, but of a free woman of the Asad tribe of the Quraish. Her name was Hind, daughter of Abū 'Ubaidah, son of the famous Ṣaḥābī 'Abdu'llah ibn Zam'ah al Asadī—may God accept him. She was also the mother of his two brothers Muḥammad, known as Al Nafsu'l Zakīyah, to whom allegiance was sworn in Al Madīnah, and Ibrāhīm, to whom allegiance was sworn in Al Baṣrah. These three were full brothers. Allegiance was not sworn to Mūsā.

Al Tanasi, in the "Naẓmu'l Durr wa'l 'Iqyān," says (to quote briefly): "Verily, God bestowed blessing upon his descendants, and three lines of kings sprang from them—the Banū'l Ukhaiḍir kings of Al Yamāmah from his son Ibrāhīm ibn Mūsā, and the Hawāshim and the Banū Abī 'Azīz, kings of Makkah, both of whom are derived from his son 'Abdu'llah Abū'l Kirām, and the sovereignty of Makkah remains with the Banū Abī 'Azīz until this day."

The Shaikh Al Qaṣṣār writes concerning this remark of Al Tanasi as follows: "And the perfect blessing and the abundant grace consisted in our lord 'Abdu'l Qādiri'l Jīlānī, lord of the true Kingdom and the Khalifate of the Poles, and how many among the posterity of our lord 'Abdu'l Qādiri'l Jīlānī are of the just!"

'Abdu'llah, the father of Mūsā, is called Al Kāmil, and also Al Mujall (the passive participle of the fourth form of *jalla*), and, finally, Al Maḥḍ. "Al Maḥḍ" with them denotes a person whose parents are two first cousins, their two fathers being brothers. So says Muṣ'ab al Zubairī. 'Abdu'llah was so named because his mother was the daughter of his father's paternal uncle. Her name was

Fāṭimah, the daughter of 'Alī's son Al Ḥusain—may God accept them. She was also the mother of his two brothers, Al Ḥasanu'l Muthallath and Ibrāhīmu'l Ghamr. They are the first in whom descent from Al Ḥasan and Al Ḥusain was united. So says Al Azwārqānī. Thus all who are descended from them can claim descent both from Al Ḥasan and from Al Ḥusain.

The imām Mālik ibn Anas—may God accept him—handed down tradition on the authority of 'Abdu'llah al Kāmil, and when he was asked concerning the *sadl* he said: "I approve of those who imitate 'Abdu'llah ibnu'l Ḥasan when they do it."

The epithet "Al Muthannā" attached to the name of Al Ḥasan is a *laqab* given to him by the genealogists for the sake of distinction. He was not called by it in his lifetime. The same remark applies to the "Al Muthallath" attached to the name of his son. So says the author of the "Baḥru'l Ansāb."

The Shaikh 'Abdu'l Qādir—may God accept him—was born in Jīlān in the year 470 or 471. Jīlān (the "Qāmūs" says "with *kasr*") is a district in Persia, Arabicized Kīlān. Others identify it with various localities beyond Tabaristan. He was born in one of its villages called Nīf. From there he journeyed to Bagdad in pursuit of knowledge and in order to meet there the shaikhs of the Path. That was in the year 488, when he was about 18 years of age. There he studied the ordinary subjects—the Arabic language, law, tradition, and the rest—under a great number of imāms whose names will be found in the books which describe his virtues, until he was qualified to hold disputations and to lecture on thirteen different subjects, and began to issue legal decisions according to the schools of the two imāms Al Shāfi'ī and Aḥmad, but the school on which he relied chiefly in the first instance was that of Aḥmad.

After this he associated with a number of the lords of intelligence and the most eminent shaikhs, under whom he engaged in the study of the Path and the science of the Truth, but his mainstay in this study was the great shaikh

and 'arif Abū'l Khair Ḥammād ibn Muslim al Dabbās, to whom he adhered closely for over twenty years, and under whom he was trained and educated. And when he had been trained to perfection and had mastered the science and had attained, he took the first rank in teaching and deciding questions and in exhorting and guiding men and gathering them to God, and he was of those to whom the pen of the fatwā was given in Al 'Irāq. Sibṭ Ibnu'l Jauzi says: "He never kept a fatwā over night, but wrote down the answer as soon as he had read the question, without premeditation."

The Shaikh 'Abdu'l Wahhābi'l Sha'rānī says in the "Kitābu'l Mīzān": "I once said to Saiyidī 'Alī al Khauwāṣ: 'How can the fact that the Shaikh 'Abdu'l Qādiri'l Jīlānī submitted to the authority of the imām Aḥmad ibn Ḥanbal, and that Saiyidī Muḥammad al Ḥanafī al Shādhili submitted to the authority of the imām Abū Ḥanīfah, be reconciled with the fact that they were famed for possessing Polehood of the highest degree, seeing that the possessor of such a station submits to the authority of the Lawgiver alone?' He—may God accept him—replied: 'It may have been so with them before their attaining to the station of perfection, and then, after they had attained, people continued to associate such tendencies with their names, although they had in reality ceased from submitting to the authority of those persons.'" As for Muḥammad al Ḥanafī, the chief facts about him will be found in the "Ḥusnu'l Muḥāḍarah" of Al Suyūṭī and in the "Ṭabaqāt" of Al Sha'rānī.

The period during which the Shaikh was engaged in teaching publicly was forty years, counting from the year 521, when he was about 50 years of age, and the period of the headship of his college was thirty-three years, from the year 528, the year in which the building was finished, to the year 561, which was the year of his death—may God accept him; for he died on the night of Saturday, the 8th of the latter Rabī' of that year, being 90 years of age, and his son the Shaikh Abū Muḥammad 'Abdu'l Wahhāb said the prayers over him, and he was buried immediately after within his college.

A large number of learned and famous shaikhs were trained by 'Abdu'l Qādir in both exoteric and esoteric science; traditions were handed down on his authority, and people gladly came from distant regions to benefit by his instruction. Amongst those who were trained by him in exoteric knowledge were his ten sons (whose names are given below),[1] and those of them who handed down traditions did so on his authority, as also did others. Ibn Ḥajar says that his sons 'Abdu'l Wahhāb, 'Abdu'l Razzāq and Mūsā, as well as the ḥuffāẓ Abū Sa'īd al Sam'ānī, 'Umar ibn 'Ali al Qurashī, and 'Abdu'l Ghanī, son of 'Abdu'l Wāhid ibn Surūr (meaning Al Maqdisi), and he enumerates a great number, related tradition on his authority, after which he adds "and many more besides."

In a word, he is too great to require that his greatness should be proclaimed, and too fair to require that his beauty should be adorned.

"So high is he, he needs no witness to his height,
And my repeating what is well known, savours of folly."

It is even as a certain poet has said of one of the excellent of times long gone:—

"He is as it were the sun as he stands in the zenith,
Above all creation—not a fire on a hill."

The Shaikh of Al Islām 'Izzu'l Dīn, son of 'Abdu'l Salām, says: "No man's miracles have come down to us on such unimpeachable evidence as those of the Shaikh 'Abdu'l Qādir." This remark is attributed to him by Ibn Ḥajar al 'Asqalāni in an answer which he gave. He says: "We have given the words in their proper sense, on sound evidence, derived from the ḥāfiẓ Sharafu'l Dīn 'Alī ibn Muḥammad al Yūnīnī, who heard Ibn 'Abdu'l Salām say it." And he pointed to what he had mentioned in the "Ghibṭah" in the fifth *bāb*, which is devoted to an account of the people's praises of him. It is as follows: "Abū Hurairah, son of the ḥāfiẓ Shamsu'l Dīni'l

[1] In the Second Part.

Dhahabī, informed us, on the authority of his father, that the latter had heard the ḥāfiẓ Sharafu'l Dīni'l Yūnīnī say: 'I heard the Shaikh 'Izzu'l Dīn ibn 'Abdu'l Salām say: "No man's miracles have come down to us on such unimpeachable evidence as those of the Shaikh 'Abdu'l Qādir."' Then it was said to him: 'This is in spite of his theological opinions?' He replied: 'The adherent of a school is not a school.'"

Many works, both large and small and medium-sized, have been written displaying 'Abdu'l Qādir's influence and worth, mentioning his great virtues and the events of his life, containing both what is commonly known and what is new and strange. Such are the following:—

The "Anwāru'l Nāẓir," by the shaikh and imām, the muftī of Al 'Irāq Abū Bakr 'Abdu'llah, son of Naṣr, son of Ḥamzah al Bakrī al Ṣiddīqī al Baghdhādī. He was one of the companions of the Shaikh, who read science under him and associated with him, and was educated by him. He is known to us from the "Bahjah" of Al Shaṭṭanaufī.

The "Nuzhatu'l Nāẓir," by the shaikh, faqīh, and muḥaddith Abū Muḥammad 'Abdu'l Laṭīf, son of Aḥmad, son of Muḥammad, son of 'Abdu'llah al Hāshimī al Baghdhādī al Narsī, who is quoted as an authority in the "Bahjah." Nars is a village in Al 'Irāq.

The "Bahjatu'l Asrār," by the shaikh, the shaikh of the readers[1] in the provinces of Egypt, Nūru'l Dīn Abū'l Ḥasan 'Alī, son of Yūsuf, son of Jarīr al Lakhmī al Shaṭṭanaufī al Shāfi'ī. Jalālu'l Suyūṭī gives an account of him in the narrative of the imāms of the readings who were in Egypt, in his book the "Ḥusnu'l Muḥāḍarah." The name Shaṭṭanaufī is derived from a village in Egypt. Between Al Shaṭṭanaufī and the Shaikh 'Abdu'l Qādir there were two connecting links. For the former studied under Al Ṣafī Khalīl ibn Abī Bakr al Marāghī al Maqqarī, the Ḥanbalī faqīh, and Al Marāghī studied jurisprudence under Al Muwaffaq Abū Muḥammad 'Abdu'llah ibn Aḥmad, known

[1] The text has شيخ الاقراء.

as Ibn Qudāmah al Muqaddasi; and Ibn Qudāmah was one of those who studied under the Shaikh 'Abdu'l Qādir—may God accept him. This book is the most complete that has been written on the Shaikh's virtues and the events of his life, as far as I know. It consists of three parts and contains everything that is curious or remarkable about him, and any of the learned who has anything to say on the subject is quoted in it. I came across an answer by the Shaikh of Al Islām Ibn Ḥajar al Asqalāni, when he was questioned on the subject of this book, in which he took a course of fairness and justice in regard to it, and avoided anything of the nature of inconsiderate harshness, in spite of his well-known violence in these matters, and his rejection of all those who are reckoned in the opinion of their people among the Poles. And so—and God is most knowing—he relies upon it and uses freely all that it relates, in the "Ghibṭatu'l Nāẓir fī tarjamati'l Shaikh 'Abdu'l Qādir"[1]—as does many another respected imām besides him. And were it not for the length of this answer I would cite it here, in order that the reader might see with his own eyes with regard to this book.

I have made myself acquainted with all these works except the first, as I have made myself acquainted also with the "Epitome of the Bahjah," by another author.

"And amid the diversity of those who describe him with his description
Time passes on, and in him is what has not yet been described."

But we will adorn the neck of this exposition with a small pearl from the necklace on that throat, and we will sweeten its watering-place with a drop from the sweetness of that sea.

In the handwriting of the learned imām and 'ārif Abū Muḥammad 'Abdu'l Raḥmān, son of Muḥammad al Fāsī—may God have mercy upon him—is as follows:—"The Shaikh

[1] As Al Suyūṭī says of another work ascribed to Ibn Ḥajar:

لم اقف عليه مع شدة طلبي له

Abū Muḥammad Ṣāliḥ—may God have mercy upon him—(meaning him who is buried in the Ribāṭ of Asfī) says: 'I heard our Shaikh Abū Madyan say in the year 560: "I met Abū'l 'Abbāsi'l Khiḍr many times, and asked him concerning the shaikhs of the East and the West in our time and concerning the Shaikh Saiyidī 'Abdu'l Qādir." Then he said to me: "He is the imām of the just and an authority over those who 'know,' and he is a spirit in regard to 'knowledge,' and he is, as it were, a foreigner among the saints, and there is not left to separate him from the Truth but a breath, and the degrees of the saints are all below that breath, and I know the degrees of the saints." '"

The same passage occurs in the "Epitome of the Bahjah" with slight variations, for, instead of his saying "many times," it gives the expression as "three years ago"; and it has "authority of those who know," omitting the preposition "over"; and it adds after "and I know the degrees of the saints" the words "after his pointing them out." He continues: "And I never heard him say the like of that in regard to any but him." He mentions this in the life of Abū Madyan, and it did not come to him on the authority of Abū Muḥammad Ṣāliḥ.

In the handwriting of the Shaikh Al Qaṣṣār is the following: "The Shaikh Abū Muḥammad Ṣāliḥ (mentioned above) says: 'The Shaikh Abū Madyan bowed his head and said: "O God, verily I call Thee to witness, and I call Thine angels to witness, that I hear and obey." Being asked what he meant, he said: "Verily, Saiyidī 'Abdu'l Qādir has this moment said, 'This my foot is upon the neck of every saint,' and we are commanded to hear and obey." Then our companions arrived from Bagdad and informed us that he had said so on that very day.' "

The corresponding passage in the "Bahjah" is to the same effect in the account of those among the shaikhs who bowed their heads when he said it, as also the passage giving an account of those who were present at the majlis in which he said it, which runs as follows:—The Shaikh Abū Yūsuf Ya'qūb, son of Badrān al Maqqari al Qāhirī, informed us

of it in the year 669. He said: I entered Bagdad in the year 621, and went to visit the chief qāḍī Abū Ṣāliḥ Naṣr in his grandfather's college beside the Azaj gate, and I found with him a company of men, one of whom said to him: "What didst thou hear about the saying of the shaikh 'Abdu'l Qādir—may God accept him—'This my foot is upon the neck of every saint of God'?" He replied: "I heard my father, Abū Bakr 'Abdu'l Razzāq, and my uncles Abū 'Abdu'l Raḥmān 'Abdu'llah, Abū 'Abdu'llah 'Abdu'l Wahhāb, and Abū Isḥāq Ibrāhīm—may God (whose name be exalted) have mercy upon them—say at different times: 'We were present at the majlis of our father in which he said that saying, and there were present along with us over fifty shaikhs, including some of the greatest shaikhs of Al 'Irāq, and they all bowed their heads. Afterwards we were informed that other shaikhs in the chief cities, who were not present on that occasion, had bowed their heads and had stated what he had said. And we never heard of any of them who rejected his claim.'" Ibn Ḥajar has related it in the "Ghibṭah" with some brevity.

The Shaikh Zarrūq, in the fourth *bāb* of his "Qawā'id," gives it as a rule that the stating a thing of the essence is not the same as stating it with regard to accidental attributes, according to the saying of him upon whom be peace: "Salute on our part the people of the House on account of their being distinguished for combining the religious relations until, if the Faith were in the Pleiades, they would reach it."[1] And it has been said of his saying upon whom be peace: "The nearest are most deserving of kindness," that it means "nearest to God," since the people of two different religions do not inherit from one another. So the important thing is the religious root of the relations, and its branch is immaterial. And if afterwards there be

[1] اثبات الحكم للذات ليس كاثباته بعوارض الصفات بقوله عليه السلام سلمانُ منا اهل البيت لاتصافه بجوامع النسب الدينية الخ

added to that the corporeal, it may intensify the first. Thus the rank of the owner of the second does not of itself entitle to anything.

It has also been replied to the saying of Abū Muḥammad 'Abdu'l Qādir—the mercy of God (whose name be exalted) be upon him—"This my foot is upon the neck of every saint," that it means in his own time, because he combined in himself high descent and the nobility which comes from worship and knowledge, such as no other of the people of his time possessed.

Seest thou not what is related of his performing the ablution seventy times in one day, and of his fatwā to a king who had sworn to worship God with a worship in which none should share, that the maṭāf should be given up to him, all others standing aloof from him—and God is most knowing? The expression "seventy times" is what is in the "Nuzhah," and the "Bahjah" has "forty." The same fatwā is mentioned also in the "Ghibṭah," in the section which describes the wide extent of the Shaikh's knowledge, on the authority of his son, the Shaikh 'Abdu'l Razzāq. He says: "A question came to Bagdad from Persia, and was put before its learned men, but they could not solve it. It was this: A man had sworn by the triple divorce to worship God with a worship in which none should share at the time of his engaging in it. Then they brought it to my father, who wrote instantly: 'Let the maṭāf be given up to him and let him go round it seven times by himself, and he shall be quit of his oath.' Then he who had asked the fatwā did not remain in Bagdad over night."

The Shaikh Zarrūq says also in the fourth *bāb* of the same work: "Of mankind are those whom riches towards God overcome, so that miracles appear in them and their tongue flows out in prayer without halting or restraint. Then they pray by truth, of truth, for truth, in truth. Such were the Shaikh Abū Muḥammad 'Abdu'l Qādir—may God accept him—and Abū Ya'zā and the bulk of the later Shadhilites. And of mankind are those whom poverty

towards God overcomes so, that their tongue is weak and stumbling by reason of piety. Such were Ibn Abī Ḥamzah and others. And of mankind are those whose state varies from time to time, and such are the most perfect in their perfection, for theirs is the state of him upon whom be peace, seeing that he fed a thousand with a measure and tied a stone upon his own belly."

It was said to the famous Shaikh and great Pole Abū'l Ḥasani'l Shādhilī—may God accept him—that the Shaikh Saiyidī 'Abdu'l Qādiri'l Jīlānī claimed Polehood. Then he answered him who said it: "Verily, Saiyidī 'Abdu'llah al Qādir drank of a cup of which, if thou hadst drunk the like of a grain of coriander-seed, thou wouldest have claimed Divinity!"

ART. VII.—*Further Notes on a Malayan Comparative Vocabulary.* By C. OTTO BLAGDEN.

WITH reference to my article on MS. No. 29 of the Maxwell Collection in the Journal for July, 1902, my friend Mr. S. H. Ray, whose wide acquaintance with a number of out-of-the-way languages is well known, sends me the following note, which I think will be of interest to the readers of the Journal:—

"The languages of Mr. Blagden's specimens are, besides the Malay, (1) مكواة or مكواة (Mäkuah or Mäkuat), (2) توليهو or امبون توليهو (Tulehu or Ambon Tulehu), (3) مندورا or مندور (Mandura).

"The مندور is, as Mr. Blagden points out, the language of Madura, the island at the eastern end of Java. Comparison with the Woordenboek of Stokmans and Marinissen[1] shows that the list is tolerably accurate. There are a few erratic spellings, such as كددغ for *këthöng* (banana), تونپا and نكئ for *donja* and *nëkgörë* (land, country), فاتيئ for *pattè* (dog), تانن for *tannang* (hand); and there are a few Malaicisms, such as مات اريه for *arê* (sun), كلوار اريه for *mëtô arê* (sunrise), اوّلة for *tjàtjing, òlaq* (worm), تابون (Malay, wasp) for *njarôan* or *manjang* (Madura, bee or wasp), مات سوكو for

[1] W. J. Elzevier Stokmans and J. C. P. Marinissen: "Handleiding tot de beoefening der Madoereesche Taal met Woordenboek"; Soerabaia, 1880. In quoting from this book I have retained the Dutch orthography, as in *tj*, *oe*, *nj*, etc.

kĕmèrè (ankle). A few words are incorrectly or imperfectly translated, e.g., ايڠ (milk) should be *aèng sossô* (water (of) breast), and putrid should be *boessò*, *boetjò*, باچڠ meaning 'a stink.' Allowing for these slight errors, only three words of the forty-four given by Mr. Blagden are unrecognizable. These are لَ زْ (wing), لچيفن (forearm), and جمبولن سوكوْ (big toe).

"The next vocabulary, which the compiler called تولييهو or امبون تولييهو, seems to be the Tulehu (Toelehoe in Dutch orthography) of Van Hoevell, who in his notes on the dialects of Ambon (Amboyna)[1] mentions the Tulehu as a dialect of that island which has been influenced by Hatoehahasch of the Mahomedan villages on the west coast of Haruku (Haroekoe) Island, which lies opposite. Van Hoevell gives no vocabulary of the Tulehu dialect, but has fully illustrated that of Haruku, and gives also two dialects of Amboyna, and those of the neighbouring islands Saparua and Nusa Laut. I give here a repetition of those words in Mr. Blagden's list which agree with Van Hoevell. They prove definitely the genuineness of the Tulehu vocabulary.

"In the quotations from Van Hoevell, Hil., Asil. = Hila and Asilulu in Amboyna; Har. = Haruku Is.; Sap. = Saparua Is.; N. = Nusa Laut Is.

[1] Baron G. W. W. C. van Hoevell: "Iets over de vijf voornaamste dialecten der Ambonsche Landtaal (Bahasa Tanah)," in Bijdragen tot de Taal-, Land- en Volkenkunde van Ned. Indië, 4de Volg., Deel i, pp. 1-136.

ENGLISH.	تولیهو	AMBOYNA (VAN HOEVELL).
Black	ميتئ	mete (Hil., Har.), mite (Asil.).
White	فوتئ	puti (Har., Hil., Asil.).
Land, country	اماني	amane (Hil.) = village (dorp, negerij).
Mainland	نوسا ايل	Cf. 'island,' elae (Hil. = great).
Stone	هاتويه	hatu (Har., Hil., Asil.).
Ironstone	هاتو تااي	Cf. 'stone' and 'iron.'
Gold	هلاوني	halawane (Asil.).
Silver	سلاكائيه	salaka (Hil., Asil., Sap., N.).
Iron	تاءاي	taa (Hil., Asil.).
Island	نوسانا	nusa (Har., Hil., Asil., Sap., N.).
Water	واايريه	waelo, wael (Har.).
Sea	ميئتيه	meito (Sap., N.); in other dialects meit = shore.
Wind	انينيه انين	anine (Hil., Asil.). anin (Har.).
Sea-wind	انين لاوتيه	laute (Hil., Asil.), lau (Har.) = sea.
Rain	اولائيه اولا	ulane (Asil., Hil.).
Day	فيتو	petu (Hil., Asil.).
Night	اَتَتورويئه	atolu (Har.).
Sun	ريبا متائيه	riamatai (Har.).
Moon	هولئ	hulane (Hil., Asil.).

ENGLISH.	تولیهو	AMBOYNA (VAN HOEVELL).
Star	ماريية	mari (Har.).
Fire	اَوُ وِيه	hau (Har.), au (Hil., Asil.).
Cocoanut	نييريه نيارِي	niwel (Hil., Asil.).
Arecanut	هووَي	huwa (Har., Hil., Asil.).
Banana	كولي	kula (Asil., Hil.).
Leaf	لَوْيْري	lauwel (Har.).
Dog	اسو	asu (Har., Hil., Asil., Sap., N.).
Bird	مانو ٢	manu (Har., Hil., Asil.).
Fowl	مانو	manu (Har., Hil., Asil.) = hen (kip).
Snake	نيَايْ	nia (Har., Hil.).
Fish	اييانيه	iane (Hil., Asil.).
Worm	اوريه	ure (Har.) = maggot.
Fly	لاريه	lale (Asil., Hil.).
Wing	ايهيتاريه	ihule (Har.).
Egg	تيروريه	teruillo (Sap.).
Hair	كيوريه	keuru (Har.).
Eye	ماتاي	mata (Har., Hil., Asil., Sap.).
Nose	ايروووي	iru (Har.).
Tooth	نِكتِي (?)	niki (Hil.).
Tooth, canine	نيكي اسو	Cf. 'tooth' and 'dog.'
Forearm	ليمِ واكيْ	rima hua (Har.) = upper arm.

ENGLISH.	تولیهو	AMBOYNA (VAN HOEVELL).
Hand	ريماي	rima (Har., N.).
Breasts	سسويه	susu (Har., Hil., Asil., Sap., N.).
Milk	سسو ايني	susu-waeni (Har.).
Belly	تياي	tia (Har., Hil., Asil.).
Leg, foot	أَيِنْ	ai (Har., Hil., Asil., Sap., N.).
Ankle	اين منتيرو ويه	ai-manteru (Har.).
Big toe	اين هاتو ايل	ai-hatu (Har. = toes), elae (Hil. = great).
Bone	رُوريبيه	ruri (Har.).
Flesh	ايسيه	isine (Hil.).
Blood	لاموري	lala (Har., Hil., Asil.).
Tears	ماتاي وَري (?)	mata-wae (Hil.).
Putrid	هو ؤ هيا	hauele (Har. = a stink).
Sick	مسيريه	masele (Har., Sap., N.).
Dead	ماتااي	mata (Sap.).
To eat	انيه (?)	ane (Har., Sap., N.).
To drink	نينو	ninu (Har., Asil.).
To see	ناؤئ [ننا ؤئ ?]	wahië (Har.), wahi (Sap., N.).
House	روماي	ruma (Har.).
Door	ميتنانورو	mintanuru (Har.).
Pot	اورينيه	urene (Har.).
Male	ملوناي	malona (Har., Hil.).
Female	مهيناي	mahina (Har., Hil., Asil.).

ENGLISH.	تولیهو	AMBOYNA (VAN HOEVELL).
Father	اماي	ama (Har., Hil., Asil., Sap., N.).
Mother	ايناي	ina (Har., Hil., Asil., Sap., N.).
Son	انق ملوناي	anahuta-malona (Har., Hil.).
Daughter	انق مهيناي	ana-mahina (Har.).

"A few additional words are recognizable, though wrongly spelled, or loan words. دنياي (world) is put for *duniai* (Har., Hil., Asil., Sap., N.); ريامتاساء (sunrise) is *riamata* (sun), *saa* (to climb up); مجاعن (deer) is the Javanese *manjangan* (*cervus rusa*); اجارن (horse) is in Haruku *aikarano*, Nusa Laut *aikaranjo*; بنافغ (pig) is probably for *binatang* (any animal). In the word for 'bee' كيريه is the Hila *kelete* (bee or wasp). The word for nostril is a compound from ايروي (nose) and وكوني, meaning 'a point' (Asil. *huhune*).[1] The word فاي (thigh) is probably a mistake for the Malay *paha*, and بوويه (cradle) for the Malay *buâian*. لاي (to come) really means 'to reach,' 'to arrive at.' The words ريتي ماتاي given for 'to wink' may be compared with the Asil., Hil. *itië*, 'flash' (bliksem). In the words for husband and wife the prefixed عين seems to be a mistake. Many of the words show the suffix *na* or *ni* (his), which is found in all the dialects. There is a very close agreement also between the words of this vocabulary and the Amboyna vocabulary of Ekris.[1]

"The Tulehu numerals are additional evidence of the authenticity of the list.

[1] A. van Ekris: "Woordenlijst van eenige dialecten der landtaal op de Ambonsche Eilanden": Mededeelingen van wege van het Nederlandsche Zendelinggenootschap, Deel viii, Rotterdam, 1864–5.

ENGLISH.	تولیهو	AMBOYNA (VAN HOEVELL).
One	ایکا [ایسکا ?]	isaka (Hil.).
Two	روا	rua (Har., N.).
Three [wanting: but see Thirteen].		
Four	هالیه [هانیه]	haa (Har., Sap., N.).
Five	ریما	rima (Har., N.).
Six	نینا	nena (Hil., Asil.).
Seven	ڤیتو	hitu (Har., Sap., N.).
Eight	ورو	waru (N., Har.).
Nine	سیا	siwa (Har., Hil., Asil., Sap., N.).
Ten	هوسا	husa (Har., Hil., Asil.).
Eleven	هوسیلاریه	husaielae (Har.).
Twelve	هوسیلارو	husailaruwa (Har.).
Thirteen	هوسیلاتیرو	husalatehu (Hil., Asil.).
Fourteen	هوسیلاهانیه	husalahaa (Har., Sap., N.).
Fifteen	هوسیلاریما	husailarima (N.).
Sixteen	هوسیلانینا	husailanoo (Har.).
Seventeen	هوسیلاایتو	husalaitu (Hil., Asil.).
Eighteen	هوسیلاورو	
Nineteen	هوسیلاسیا	huselasiwa (Hil., Asil., Sap.).
Twenty	هوتوروا	huturua (Har.).

ENGLISH.	تولیهو	AMBOYNA (VAN HOEVELL).
Twenty-one [see below: Thirty].		
Twenty-two	هوتوروَلروا	
Twenty-three	هوتوروالتيرو	
Thirty [wrongly given as Twenty-one].	هوتيرو	hutoru, hututoru (Har.).

"There can thus be no doubt that the Tulehu list is what it purports to be, and it is, so far as I know, the only vocabulary of that dialect which exists.

"The مكواه or مكواة is really the Makua language of Eastern Africa, as the following comparisons clearly show:—

ENGLISH.	مكواه	MAKUA.
Black	اوريبفاء	-oripa.
White	(?) اوتيلا	-otela.
World	ايلافوه	ilapo.
*Land, country	إيتا	iwani.
Mainland	تايا	
Stone	ملوكو	nluku, *plur.* maluku.
Ironstone	ملوكو يوما	Cf. 'stone' and 'iron.'

ENGLISH.	مكواه	MAKUA.
Gold	دالاما	indarama.
Silver	ناريا	ndarama.
Iron	يوما	iyuma.
Island	ماكوه	ntinji (cf. Makua, the name of the language).
Water	ماجي	mashi.
Sea	موریاني	mashomaka.
Wind	ايفيوه	ipeo.
Sea-wind	ايفيوه يوكوفيله	Cf. wind; yo = of.
Rain	ايفوله	ipula.
Day	نِهوكو	nihuku.
Night	اوُّهيو	uhiu.
Sun	انچواه	nchuwa.
Sunrise	انچوانكوماك	Cf. Kamba dzua ikumala.
Moon	مويري مويرُوْ (?)	mweri (Msambiji dial.).
Star	ايتوندو	itotwa.
Fire	مورو	moro.
Cocoanut	ايكُوْلي	mkole, *plur.* mikole.
Arecanut	ايفاكا	
Banana	اِنيكا	inika.
Leaf	ميتاكورو	ntaku.
Tiger	حتباره (?)	

ENGLISH.	مكواه	MAKUA.
Deer	ايفاله	Cf. Nyika, etc., pala, Swahili paa, = gazelle.
Horse	ايپوفو	inyupu = mule.
Dog	ملافه	mwalapwa.
Pig	ايكولوي	ikuluwe.
Bird	مانوني	mwanuni (Msambiji dial.). shanuni.
Fowl	ملاكو	ilaku, *plur.* ilaku.
Snake	اينواه	inoa.
Fish	ئيهوفا	ihopa.
Worm	موڠكو	mwamunku = caterpillar (worm = nrithi).
*Bee	كوتاء	inui.
Fly	ففيلي	ipepele.
Wing	نيفافا	nipupa.
Egg	نيوه چيه	nyoche.
Hair	ايكاراري	ikarari.
Eye	ميتتؤ	mitho.
Nose	ايفولء	ipula.
Nostril	مويت وفولء	ipao yo pula (mwithe = hole).
Tooth	مينوء	nino, *plur.* mino.
Tooth, canine	منينوء اوتيّ	

ENGLISH.	مكواه	MAKUA.
Forearm	مؤنو	mono.
* Hand	اينارؤ	mthatha.
Breasts	مفلي	mapele.
Milk	ماجي مفلي	mashi = water, mapele = breasts.
Belly	روكولي	irukulu = stomach (belly = marupo).
Thigh	ايتارا	
Leg, foot	پاوو	nyao.
Ankle	ايكوٗ نا پآوٗ	Cf. Swahili ito la guu.
Big toe	ايكو پاو	
Bone	مكواه	nikuva, *plur.* makuva.
Flesh	ايتاي	ithayi = fleshiness (inama = flesh).
Blood	ئيفوميه	ipome.
Tears	ميثوٗري	mithori.
Putrid	ونتاء	unta.
Sick	ويريه اي	uwerea = to be sick (sickness = ureta).
Dead	اوهوكواه	ukwa = to die.
To eat	اوليا	ulia.
To drink	اوبوريبا	uria.
To wink	اوتيله	wupila.
	[اوفيله ?]	
To see	ويباء	uweha = to look.
To come	اهوروا	uroa = to go away (ua = to come).

ENGLISH.	مكواه	MAKUA.
House	اينوفا	inupa.
* Door	كوره	mlako.
Cooking-pot	مافو	mwapo o yuma = saucepan.
Pot	ايكلاكو	ikariko.
Cradle	متابي	
Heaven	اشكور	Cf. Swahili kule.
Hell	اوكاليري	
Male	لوفنا	mlopwana.
Female	انتيانا	mthiana = woman, *plur.* athiana.
Husband	موهُلوفا	mlopwana.
Wife	نملوايلي	mthiana.
Father	اتيَتي	athithi (atiti, Msambiji dial.).
* Mother	امما	manyi (amaya, Msambiji dial.).
Son	مملوَفنا	
	منا ملوفنا	mwana mlopwana.
Daughter	مَمْتِيَنَا	
	مَمنَتِيَنَا	

"The Makua words are quoted from Maples' Handbook of the Makua Language,[1] which does not contain the Makua equivalents of all the words in this list, but one or two others on comparison with cognate languages may probably

[1] Rev. Chauncy Maples: "Collections for a Handbook of the Makua Language"; London, S.P.C.K. [1879?].

be found correct. Mr. Blagden has quoted eighty-eight words from the MS., and of these (allowing for slight errors) only six appear to be wrong, whilst twelve are not identified. Thus more than 70 per cent. of the vocabulary is correct."

It is rather satisfactory to find that the unknown compiler of these lists has done his work with such relative accuracy; and the identification of the سکواه disposes at once of the doubt I had expressed as to its genuineness, and the suggestion I had thrown out that it might have to be sought for in the Papuan or Melanesian regions. But it presents us with the rather surprising phenomenon of an East African dialect collected by a Malay of the Peninsula; and the question naturally arises, did he collect it in Africa itself (which seems unlikely), or in the Peninsula, from some stray Kaffir sailor or coolie, if any such there be; or was it collected at some cosmopolitan place, like Meccah, where many races meet? It would be interesting to know; and possibly a careful examination of the سکواه list by some one learned in East African languages might throw further light on the question.

CORRESPONDENCE.

1. Notes on Chinese Buddhist Books.

Nakarokuban 14,
Tokyo.

Dear Professor Rhys Davids, — In our Journal for April, 1891, Professor Poussin noticed the two important discoveries by Professor Vidyābhūṣaṇa, of which the first relates to the Śāli-stamba-sūtra quoted by Candra-kīrti in chap. xxvi of his Mādhyamaka-vṛtti, by Śāntideva in his Śikṣā-samuccaya, also by Prajñākaramati in his Bodhicaryāvatāra-ṭīkā, as giving a complete *exposé* of the Paṭicca-samuppāda.

Looking into the Chinese Buddhist books, I have found several corresponding texts to some of these works. First as to the Śāli-stamba-sūtra. This interesting little compendium of the twelve nidānas is, in Chinese, represented in the following texts:—

1. Tā-ṣan-śa-li-sa-tan-ma-ciṅ, lit. Mahā-yāna-śāli-stamba-sūtra. Translated by Shihu in A.D. 980, Nanjio's Catal., No. 867, under which *Śāli-stamba* is given as *Śāli-sambhava.*
2. Tao-kan-ciṅ, lit. the Paddy straw sūtra. Registered as translated under the East Tsiṅ dynasty, A.D. 317–420. Nanjio's No. 280.
3. Liao-pan-ṣaṅ-ssu-ciṅ, lit. the sūtra on understanding the origin of birth and death. Translated by Ci-cien of the Wu dynasty, A.D. 222–280, Nanjio's No. 281, under which the existence of another version before the Taṅ dynasty is recorded.

There is another sūtra of the same name spoken by Maitreya, i.e. Nanjio's No. 963, which I have failed to find out. The sūtra on the meaning of 'anātman,' No. 818, which is given by Nanjio as a similar work, is in reality a different one, as its contents show.

Next we come to Candra-kīrti's Mādhyamaka-vṛtti. The existence of the four commentaries in Chinese have been noticed by Mr. D. Suzuki, a Japanese now with Dr. Carus, of America, in the Journal of the Buddhist Text Society, vol. vi, pt. 4 (1898), see p. 29. They are as follows:—

1. A vṛtti by Piṅgala, Nanjio's No. 1179.
2. ,, Asaṅga, No. 1246.
3. ,, Fen-pieh-miṅ, No. 1185.
4. ,, Sthitamati, No. 1179.

The first Indian author is not Piṅgala in reality. Mr. Suzuki seems to have been misled by the Chinese interpreter, who says in the preface to the vṛtti that its original was written by a Brahmacarī Tsiṅ-mu, lit. the 'blue-eyed,' the Indian original being Piṅgala, etc. Piṅgala, however, is not the 'blue-eyed,' but the 'tawny-eyed.' The 'blue-eyed' is a name of Candra-kīrti, the actual author of the Sanskrit vṛtti, who is otherwise styled as Ārya Deva (Bodhisattva).

This we learn at once, referring to Nanjio's Catalogue, under Deva, Appendix i, p. 370, where, quoting J.A.S. Bengal, 1882, p. 96, he gives Deva's names, Candra-kīrti, Nīla-netra (Chin. Tsiṅ-mu, the 'blue-eyed'), and also Fen-pieh-miṅ (the 'distinct-brightness'). This last, again, explains the name of the author of the 3rd vṛtti above mentioned, i.e. Fen-pieh-miṅ, which may be Śānti-prabhā in Sanskrit, as given by Mr. Suzuki. The Bodhi-caryāvatāra is by Śānti-prabhā Śānti-deva. The 2nd vṛtti, by Asaṅga, is not, strictly speaking, a commentary on the Mādhyamaka-śāstra, though it treats partly of the same subject. The 4th vṛtti, by Sthitamati, is also a good commentary. The 1st and 3rd, from the names of the authors, point to one and the same work, but they differ widely, and probably are not the same altogether. Deva seems to have been a reputed

author of the Mādhyamaka Aphorism. Either totally different works have been attributed erroneously to one author on account of his reputed authorship, or the names of different men have been identified with one particular author on the same ground. The identity of Deva with Candra-kīrti, Śānti-prabhā, and Nīla-netra requires a more detailed investigation. The Sanskrit, Tibetan, and Chinese vṛttis, on the whole, agree with one another, containing twenty-seven chapters, each chapter treating of a similar subject.

As to the Bodhi-caryāvatāra and the Sikṣā-samuccaya, I can say at present only that the texts bearing similar titles exist among the Chinese books, i.e., Bodhi-caryā-sūtra, Nanjio, No. 1354; Mahāyāna-saṅgītī-bodhi-sattva-vidyā-śāstra according to Nanjio, but it can be also Mahāyāna-bodhisattva-śikṣā-samuccaya-śāstra, Nanjio, No. 1398. While I was looking through the above-mentioned books a note from Mr. W. Ogiwara, who is now studying under Professor Leumann, of Strassburg, reached me. He had noticed the existence of the Chinese versions of the Bodhi-caryāvatāra and the Śikṣā-samuccaya some months before myself, and seems to be comparing them with the Sanskrit originals now that Mr. Bendall's text is out. As the texts quote several other works, a careful examination will throw much light on the dark passages of Buddhist literature.

I am fully convinced that most, if not all, of the best known Sanskrit Buddhist books can be found among the Chinese books, if we only carefully examine into them.—Yours ever truly,

J. Takakusu.

2.

Cuttack (*Orissa*).
Sept. 2, 1902.

Dear Sir, — Is it not strange that, after a study of Kālidāsa's works for more than a century, his date has not yet been even approximately ascertained? Scholars like Professor Max Müller and Professor Macdonell disagree,

one putting him in the sixth century (*India*), the other putting him more than a century earlier, in the beginning of the fifth century A.D. (Hist. Sans. Lit., p. 321).

May I suggest a point or two to help in the matter?

First, I draw attention to Raghuvaṁça, canto iv, çlokas 58–71. These verses deal with the *digvijaya* of Raghu on the western frontier of India. Therein, briefly speaking, Raghu is said to have taken tribute from the kings of *Aparānta* (v. 58), to have gone to the *Pārasikān* by land route (v. 60) and defeated them (v. 69), to have turned northwards to the banks of the *Sindhu* and there crushed the Huṇas (v. 68), to have subdued the Kāmbojas (v. 69), after which he climbed the Himālayas.

The above description indicates that at that time the Persians occupied, on the western border of India, the lowest portions (probably Beluchistan and Kāndāhar), that to their north lay the *Huṇas* (variant, Hunas) on the banks of the river Indus (variants, 'Vaṅku' and 'Maṅku'), and that the *Kāmbojas* lay further north, at the foot of the Himālayas.

To what period may be ascribed such grouping of tribes?

From the Chinese and Persian histories, aided by the light thrown by extant coins, it appears that the Huṇas, an offshoot of the Ephthalites or White Huns, conquered, on one hand, *Gāndhāra* from the Ki-to-lo (*Kidāra*) kings before 475 A.D.; and on the other hand, inflicted a disastrous defeat on the Persian king Fīrūz in 484 A.D. (in which the Persian king lost his life and the eastern provinces of Persia). (Cunningham, Drouin, and Gutschmid; Rapson's *Indian Coins*, Arts. 76 and 103; cf. also the article on "Persia" in the Encycl. Brit., 9th ed.)

This Huṇa conquest of Gāndhāra is confirmed by Sung-yun, the Chinese monk-traveller, who says:—

"During the middle decade of the 4th month of the 1st year of Ching-Kwong (520 A.D.) we entered the kingdom of Gandhāra. . . . . This is the country which the Ye-thas destroyed, and afterwards set up Lae-lih to be king over the country; since which event two generations have passed." [1]

[1] Beal's "Buddhist Records of the Western World," vol. i, xcix–c.

Ye-tha is the name given by the traveller to the Ephthalites. According as we take three generations or four generations to a century, the conquest of Gāndhāra by the Huṇas must, according to this tradition, have taken place some time between 455–470 A.D.

From the above facts, the inference is reasonable that this passage in the Raghuvaṁça (at least its fourth canto) refers to a period *some time after* 460–5 A.D., by which time the Huṇas had, by their conquest of Gāndhāra (the Cabul Valley), come to settle on the banks of the Indus; and *some time before* 484 A.D., when the eastern portion of Persia passed on to the White Huns. Would not thus the end of the fifth century A.D. be the approximate date of *Raghuvaṁça*?

I would further draw attention to the subject-matters of the two epic poems, and to the extent of Raghu's empire. It is not improbable that Kālidāsa, who would naturally have been attracted to the court of the Gupta emperor, selected *Kumāra-sambhava* (the birth of Kārttikeya) because this god was a *Kula-devatā* of the later Gupta emperors (witness their names, Kumāra Gupta and Skanda Gupta, and their silver coins with peacocks on the reverse); and selected Raghuvaṁça because these later imperial Guptas, with their capital at Sāketa (Ajodhyā), had become associated with Rāma and his dynasty.

The Gupta empire comprised practically the whole of Northern India, exclusive of portions of Panjab and Bengal. The eastern part of Panjab was in all probability a part of the Gupta empire in the time of Skanda Gupta and probably of Kumāra Gupta also, for Skanda Gupta had various wars with the Huṇas along this border. To judge from the frontier kingdoms invaded by Raghu, *this Gupta territory was exactly the empire of Raghu* as described in Raghuvaṁça, canto iv; and it is not impossible that in this way the poet might have wished indirectly to flatter his patron king, who may be conjectured to be Skanda Gupta (*circa* 452–480 A.D.).

From internal evidence, Raghuvaṁça appears to be later and more mature than Kumāra-sambhava or Meghadūta.

The metre, the verse melody, the upamās, and the general handling of the subjects in Raghuvaṁça—all show a master's skill. In Kumāra-sambhava metrical defects and prolix repetitions occur, while the erotic passions have been dealt with more crudely. In the Meghadūta the latter defect is still more apparent, as is natural to a still younger age. Meghadūta is also silent about Gupta connections and Central India, probably because Kālidāsa had not then been attracted to the Emperor's Court, thus having to leave his beloved Ujjayini. For this comparative growth in poetic powers fifteen to twenty years may be allowed. The three works would then fall in the third quarter of the fifth century A.D.—Yours truly,

MONMOHAN CHAKRAVARTI.

Professor T. W. Rhys Davids,
Secretary, Royal Asiatic Society, London.

3. RARE PĀLI WORDS.

DEAR PROFESSOR RHYS DAVIDS,—In note 4 on p. 7 of the Dialogues of the Buddha, you discuss the meaning of the word *pekkham*. Though this appears to be a rare word in Pāli literature it has survived to the present day in the form of *pekhnā* पेखना. Sleeman, in his "Rambles and Recollections" (ed. V. A. Smith, vol. i, p. 7), writes: "the 'Gauri Sankar' of the temple above was a real *Py-khan*, or a conversion of living beings into stone by the gods." Mr. Smith, in a note on the word *Py-khan*, identifies it with *pekhnā*, defined by Fallon and also Platts as a puppet-show. The word is not very common in the United Provinces, where *putlī nachānā* takes its place.

It is curious how nearly all the amusements reprobated are still almost exclusively in the hands of the strange people called Nats. Three of the divisions of these are the Nacaria (dancers), Bādī (cf. *vāditam*), and Bajaniya (musicians), and they are well-known acrobats.

On p. 258 there is a discussion as to the meaning of *mangura*. The common phrase in use now for a fair complexion is *gehūṅ*, or wheat(-coloured).

p. 230, Sāmāka. We have three common names in these provinces—Sāmā, Sāmak, and Sāṅwā—all applied to *Panicum frumentaceum*, which is cultivated but is considered a poor grain, as well as to a wild grass with a grain occasionally eaten.—Yours sincerely,

RICHARD BURN.

Naini Tal.

NOTICES OF BOOKS.

MAHĀMAHOPĀDHYĀYA HARAPRASĀD ŚĀSTRĪ, Honorary Joint Philological Secretary of the Asiatic Society of Bengal. REPORT ON THE SEARCH FOR SANSKRIT MSS. (1895–1900). 25 pp.; large size. (Published by the Society, 1901.)

The news that Pandit Haraprasād Śāstrī was printing the Catalogue of the Nepal Durbar Library,[1] and that Professor Cecil Bendall had agreed to write, as an introduction to this Catalogue,[2] an essay on the history of Nepal and surrounding kingdoms, has given me the greatest satisfaction.

By the recent explorations of such scholars as S. Lévi, C. Bendall and Haraprasād, our knowledge of the older Buddhist Sanskrit documents has increased. For years we were obliged to confine our researches to the MSS. sent to Europe by Hodgson. Then the Cambridge Catalogue of the Wright Collection marked a new stage of progress. But now our hopes are better to-day, as Khotan will not conceal its treasures for ever; and the time may be coming when, in that field of Indian philology, the number of our texts promises to prove a positive *embarras de richesse*.

We will endeavour to indicate the more interesting amongst the large number of MSS. hitherto noticed by Haraprasād, partly in the Proceedings and in the Journal of the Society of Bengal, partly in his Report, 1895–1900.

[1] See the pamphlet published so early as 1868 by the Resident, Mr. Lawrence; the Cambridge Catalogue; the account of the Library by Haraprasād in the Journal of Bengal (lxvi, pt. 1), 1897; S. Lévi, Acad. des Inscriptions, Séance du 27 Janvier 1899; and C. Bendall, J.R.A.S., 1900, pp. 163 and 345–7.

[2] Also published as article, J.A.S.B.

The *Niśvāsatattvasaṁhitā*[1] seems to be a work of real interest. The MS. is written in a form of Gupta which can be at latest referred to the beginning of the ninth or to the end of the eighth century. It deals with Tantric matters, but in a very extraordinary way, the interlocutors being Ṛṣis, men of the 'old school' of Tantrism! The very subject of the discourses, according to Haraprasād, is the non-vaidic initiation or *dīkṣā*. The Ṛṣis wonder how there can be such a thing as dīkṣā without any reference to the Vedas. But the oldest among them explains that even the great gods like Brahmā, Viṣṇu, and others—not Çiva, who is siddha by birth—received non-vaidic dīkṣā at the very spot they were sitting upon, namely, in the celebrated Naimiṣāraṇya. The book is complete, divided into two parts, Çrautasūtra, Guhyasūtra (?). Attention must be paid to the designation 'saṁhitā.' But I do not know if it deserves to be called "an important original tantric work"; I feel rather sceptical when Haraprasād says, "The composition of this work must go back to the early centuries of the Christian era"; because, so far as we are entitled to make any conjecture on the original form of the Tantras, it seems that the very mention of Ṛṣis and such a doubt on the orthodoxy of rites are rather marks of posteriority.

Not to the ninth, but at latest to the seventh century belongs the *Kulikāmnāya* MS., acquired for the Society of Bengal by their Secretary. "The character is Gupta. I have carefully compared the letters with charts of the Gupta alphabet. . . . . The shape of letters agrees more with those of the Horiuzi palm-leaves than with any other . . . ; the proportion of *open tops* (which, as is well known, are an index of antiquity) appears to be much larger than in the ninth century palm-leaves in Professor Bendall's Cambridge Catalogue." This Tantra, actually incomplete (77 leaves from about 261), is said to have an extent of 6,000 ślokas, being a *résumé* of the *Kubjikāmata*

[1] See "Proceedings" and "Report" of the Asiatic Society of Bengal, 1900.

in 24,000 ślokas; four MSS. of the Kubjikāmata do exist, and Haraprasād has ascertained the corelation of both books. The pagination, with the rather surprising letters: Śrī, below the figure, below Ma and Ṣa, refers more probably to the following title: Çrīmate Ṣatsāhasre = "page so and so in the compilation running through 6,000 verses of the school of the goddess Çrī." [1]

The interlocutors being Bhairava and Devī, there is no doubt about the intimate relation between the Kubjikāmata and the Tantra of the same name, known by Catalogues (see P.W., *sub voc.*) and often quoted in Tantrasāra, Ānandalaharī, and elsewhere (see Oxford Cat.). This book, therefore, is common and unreadable literature; but it gives me occasion to quote Haraprasād: "The Tantras are regarded as very recent works. Some distinguished Orientalists have pronounced them to belong to the fourteenth century. The appearance of these MSS. disproves that assertion" (Proceedings, April, 1900).

So does the date of the colophon of the MS. of the *Laṅkāvatāra*, 28th year of the Newar era (908 A.D.). This Laṅkā "is a work on the treatment of fever and other diseases by medicine, incantation, and charms."

But I am afraid Haraprasād does not exactly realize the meaning of some distinguished Orientalists as concerns the age of the Tantras. That the Tantras are older than the fourteenth century nobody will deny; the dispute, if there is any dispute, bears first on a considerably older date for the books, secondly on the rather difficult problem of the influence of the Tantric ideas in civilized Buddhist or Brahmanic circles.

I have read with curiosity another note on a very similar subject. How can we settle this puzzle "that the pure metaphysical religion of Buddha could be made the medium of practising immoral and obscene rites"? "On entering the Svambhu Kṣetra [Nepal], I was, says Haraprasad,

[1] I have seen this 'Śrī' in other MSS.; but I don't think it means more than a kind of lucky mark made by a scribe. It is specially common in *first* leaves of MSS.—*Bendall.*

struck with a female figure labelled or inscribed as *Namo Dharmāya*. I at once enquired from the Residency Pandit. He coolly said *Dharma* is nothing else but Prajñā." "I know, explains Haraprasād, that Buddha is never an object of worship. His image is kept in monasteries simply for the purpose of keeping his noble example always present before the aspirers to Nirvāṇa, and so he is the Upāya or means to Nirvāṇa. I also knew that *Prajñā* or true knowledge is the great goal. . . . . But none ever suspected that Dharma and Prajñā are identical. This identification introduced a female deity into the Buddhist Trinity, and she at once became the mother of all Bodhisattvas, being [taken as] representing the Saṁgha. . . . ." This hypothesis is clever indeed, and well deserves notice; nevertheless, one will observe that the deification of the pantheistic and idealistic Prajñā in the shape of a feminine body is an altogether Tantric idea; and that the identification of Dharma with Prajñā, parallel to the identification of Dharma with pratītyasamutpāda, known from Pāli sources, has not been of any moment in the development of this idea. Upāya in some cases is Karuṇā opposed to Prajñā; in Tantric texts of the Kālacakra school it is synonymous with *liṅga*.

Haraprasād has acquired a manuscript of the *Aṣṭasāhasrikā*, copied at Nālanda in the sixth year of the reign of Mahīpāla (first part of the eleventh century), and curiously inscribed as written "in the year indicated in the page mark. This page mark is 303." The era is difficult to ascertain. The MS., as many other Prajñāpāramitās, is enriched with many illuminations. (Proeeedings, March, 1899.)

Four leaves from an old MS. in Bengali characters, "in fact, intermediate between Gupta and Bengalī," contain fragments of a supplement to the Amarakośa. The author is a Buddhist; he adds many synonyms to the Buddhist words—for instance, Gopeśa for Buddha. I do not know if these curious identifications have been, as it was the intention of the Pandit, "published in the Journal" (Proceedings, April, 1900). A MS. of the Amarakośa,

dated 1185, has been noticed by Haraprasād in 1893 (J.A.S.B., p. 250), and should prove useful for the critic of the text.

Very old is the MS. of the *Skandhapurāṇa*, in Gupta hand, to which so early a date as the middle of the seventh century can be assigned on palæographical grounds.

As concerns the Buddhist Darçanas, there are discoveries of first-rate importance. There are, besides, two MSS. purporting to be works of Ratnakīrti, entitled *Apohasiddhi* (eight leaves only) and *Kṣaṇabhaṅgasiddhi*. A full description of both occurs in the Report, p. 12, and Haraprasād rightly insists on their evident importance. "These are the first treatises written in a philosophical style and on philosophical topics." This statement is not perfectly accurate, as the Bodhicaryavatāra, the Madhyamakavṛtti, the Abhidharmakośa deserve the same appreciation. Nyāyabindu—I agree with Haraprasād—is more a treatise on Buddhist logic than on philosophy, but the whole of the pariccheda on pratyakṣa is a dissertation on the theory of knowledge. The theory of *Apoha* is "very important in Buddhist philosophy." As the *nominalism* of the school objects to any idea of *genus*, the difficulty is got over by a rather subtle artifice. An *aśva* is not *aśva* by *aśvatva*, but because he is not a *go* or anything different from *aśva*. The aśva is atad-vyāvṛtta, different (vyāvṛtta) from what is not that (a-tad). We know the doctrine fairly well, if we do not realize it (of course!), by the discussion of Kumārila (Çlokavārtika). The celebrated Mimāṁsist, or his commentator, quotes on the matter, as it has been said in the Journal (1902, p. 365), a large number of ślokas from the Pramāṇasamuccaya by Dignāga. Ratnakīrti wrote the Kalyāṇakāṇḍa, the Dharmaviniçcaya (Tanj. Mdo, lxi), a commentary to the Madhyamakāvatāra. Being son of the king, he had been converted by the "Epistle to a pupil" of his friend Candragomin (Wassilieff). So he was the contemporary of Candrakīrti and of several ācāryas of reputation.

The second treatise, Kṣaṇabhaṅgasiddhi, in two parts, proves "that no entity exists for more than one kṣaṇa."

The first part, complete in eleven leaves, proceeds by *anvayavyāpti* (where is existence there is momentaneity); the second one, incomplete, nine leaves, by *vyatirekavyāpti* (where is not momentaneity, there cannot be existence). I do not believe, as does Haraprasād, that "the author of the Sarvadarçana probably had Ratnakīrti's book before him, when writing the portion of the work concerned with Bauddhadarçana," but in noticing parallel sentences in both works, also in Udayana's Bauddhādhikāra, Haraprasād shows us that he knows the right method to follow in editing the book.

Ratnakīrti mentions Saṁkara and Nyāyabhūṣaṇa, an ancient writer on Mīmāṁsā: "he gives a summary of Śaṁkara's arguments against the Buddhists in a few words, and refutes them; . . . he shows a mastery over the Sanskrit language and the philosophical style which is unique."

A new recension of the Prajñāpāramitā has been found, called *Svalpākṣarā*, Prajñāpāramitā in a few words, three leaves only. "The authorship of the Prajñā is a question involved in obscurity . . . . There is one clue to the solution of this question obtained from the MSS. under notice: they profess to have been brought from the nether worlds by Nāgārjuna: āryanāgārjunapādaiḥ pātālād uddhṛtā. That Nāgārjuna and his learned followers had a hand in the composition of these works appears to be certain from this passage." Observe the curious character of this shortest recension: according to Haraprasād there is no metaphysic in it, but only common practical formulas: bodhisattvena mahāsattvena samacittena bhavitavyam, maitrīcittena . . . , kṛtajñena . . . , kṛtavedīnā . . . , sarvapāpaviratacittena . . . .

The *Kavivacanasamuccaya* and the *Dohakoṣapañjikā* are important books. The first is a Sanskrit anthology divided into vrajyās (sugatavrajyā, lokeçvara°, sūrya° . . . .), well furnished with stanzas of Aśvaghoṣa, Jetāri, Ratnakīrti . . . ; the second a commentary on a Prakrit anthology in the interests of Buddhism. Professor Bendall is studying

the last-named, full indeed of difficulties of several kinds, but well deserving time and labour.

This review must now come to an end; were I to make it complete, I should merely be giving a new edition of the Report. My main object has been to call attention to the achievements of the Pandit Haraprasād, and to pay to him a tribute of friendship and of admiration.

LOUIS DE LA VALLÉE POUSSIN.

LORIMER'S GRAMMAR AND VOCABULARY OF WAZĪRĪ PASHTO.

The study of the dialects of the Pashto language has hitherto received very little attention. The well-known works of Raverty, Bellew, and Trumpp deal with what must be considered as the literary or standard form of the language as recognized in Peshāwar and Qandahār; and, although the difference of pronunciation between these two varieties of Pashto has of course been noted, there has been little recognition of the fact that, beyond this, every tribe from north to south has its own dialect, and that these dialects differ from one another in important points of grammar, vocabulary, and pronunciation. Mr. Lorimer's Grammar and Vocabulary of Wazīrī Pashto is therefore to be welcomed as an important contribution to the study of one of the most specialized of the dialects. Both grammar and vocabulary are sufficiently full to give an adequate idea of the points wherein this dialect differs from ordinary Pashto, and the numerous illustrative phrases are evidently drawn from the actual spoken language, and not (as in the case of Trumpp's Grammar) from the artificial language of the poems collected and published by Raverty and Dorn.

The Wazīrī dialect prevails among the Mahsūd and Darvesh Khel Wazīrīs and the Daurīs of the Tochī Valley, and is closely connected with that of the Banūchīs of Banū. The peculiar vowel system is common to both dialects, although the Wazīrī speech has a deep and manly tone which is lacking in the mincing pronunciation of

the effeminate Banūchīs. This group of dialects must be classed, as far as its consonant system is concerned, with the western (or rather southern) Pashto. As in the language of Qandahār, ښ and ږ are pronounced respectively sh and zh, and not kh and g as in Peshāwar. This feature is common to all Pashto dialects from the Khaṭṭaks of Kohat southwards to Sibi and westwards to Qandahār, and the change in pronunciation of well-known words gives rise to many gibes at the expense of speakers from other parts of the country. For instance, it is said that a Yūsufzai man who meant to say "My father was wounded and died this year," really said "My father was a pig; the dog is dead," that is, instead of pronouncing "Plār mi khūzh wuh, sazh maṛ-shah," he pronounced "Plār mi khūg wuh, sag maṛ-shah." Here khūzh, 'wounded,' becomes khūg, 'a pig,' and sazh, 'this year,' becomes sag, 'a dog.'

In addition to this feature of pronunciation, which is common to so many dialects, the Wazīrī group is marked off from the southern as well as the northern dialects by its vowel system. The regular changes are :—

ā	to	*o*
o	to	*e* or *ö*
u	to	*i*

The change of *ā* to *o* is already found to some extent in standard Pashto, as in *obah* and *tor*, which may be compared to the Persian *āb* and *tārīk*, and in modern Persian pronunciation the same tendency is found. In Wazīrī Pashto it is universal, borrowed words as well as Pashto being changed, as *asbob* for *asbāb*. The plural *plorīna* for *plārūna* shows two of the usual vowel changes. The alteration of *o* and *ū* to *è* and *ī* is paralleled in many Balochi words, but is carried out more systematically in the Wazīrī-Banū dialects. Mr. Lorimer shows that often *o* is changed to *ö* instead of *è*. It is strange that in a word like *obah*, 'water,' where the *o* already represents an original *ā*, a still further change takes place, and we find the form *ébö* or *yébö*.

There are many peculiar grammatical forms which deserve careful study. It is to be wished that Mr. Lorimer had given some information regarding accents in verbal conjugation, especially in the imperative. The system of transliteration followed has some peculiarities, but they are explained by Mr. Lorimer. The use of the letter *e* to denote the obscure vowel generally represented by the short *a* seems unnecessary, and it is not clear in what respect Mr. Lorimer considers the sounds denoted by *a* and *e* to differ. He says that *a* represents the *u* in *but*, and *e* the *e* in *water*, but these are generally treated as the same sound, and it is not easy to see what is the difference in the vowel-sounds of *mazh*, 'a ram,' and *mech*, 'a fly' (generally written *mach*).

These, however, are small points. Mr. Lorimer's work deserves a welcome from all students of Pashto, and for Frontier officers it will greatly facilitate the acquisition not only of the Wazīrī but of other more or less cognate dialects.

It may be added that in an appendix Mr. Lorimer gives an extremely interesting account of the Mahsūd Wazīrs, and their degenerate neighbours the Daurīs, which may be commended to ethnologists who do not care to study the Pashto language.

M. Longworth Dames.

La Cartografia antica dell' India, per F. L. Pullé. (Studi italiani di filologia indo-iranica, vol. iv. [Text and Atlas.])

It is an interesting sign of the expansion of modern Italy that within the last twenty years we have seen not only the establishment of an Italian Asiatic Society, but more recently a series of volumes of essays on the model of *Indische Studien*, entitled *Studi italiani di filologia indo-iranica*. For this last development we are indebted to the zeal of Count Pullé, Professor of Sanskrit successively at Padua and at Florence. The series has now reached its fourth volume (1901), which is devoted to the subject that has long engaged the attention of the editor.

Ancient geography belongs largely to that extensive branch of investigation, the history of human error. Yet it is the duty of specialists in every department to be conversant with the efforts of their predecessors; and hence readers of our Journal may find acceptable a brief notice of such parts of the present work as seem likely to contribute to the interpretation of Indian texts. The remaining portions of the volumes, though extremely curious and interesting in themselves, seem really to belong in great measure rather to European than Asiatic antiquities.

The present instalment of the whole work is divided into seven chapters (to which are added a series of valuable Appendices by several hands and a separate volume of maps):—I. The Egyptians, Babylonians, Phœnicians, and Jews. II. The Indians. III. Greeks. IV. Romans and Alexandrians. V. The Later Empire. VI. The Byzantines. VII. Persians and Arabs. Of these, Chapters II and, in a secondary sense, III and IV are important from our present point of view.

Geographical science, as Professor Pullé shows, was at first really as much a blank as Indian learning, as history always remained. It is only with Āryabhaṭa (6th–7th cent. A.D.) that we get an approximately true conception of the Earth as a whole. We have thus (passing over the scanty Vedic notices) to distinguish two main periods:—(1) When the earth is a plane superficies of circular form (*parimaṇḍala*), with Meru in the centre. The continent containing Meru is surrounded by the sea, which is studded with numerous islands. (2) When the spherical nature of the earth had been recognized and Meru had been relegated to the North Pole. A useful summary is given of the views of Jain authors (who understood the topography not only of the earth but also of the sun and moon!), and a curious extract is printed from two MSS. at Florence of the *Hanumaccaritra*. Also, the indications of the Bhīṣma-parvan (likewise illustrated by extracts) of the Mahābhārata are co-ordinated with those of Eratosthenes. To the Sanskrit scholar one of the most useful parts of the book will be

the Appendix, due to Professor M. Longhena, giving a classified list of the divisions of Jambudvīpa as detailed in Varāha-mihira's Bṛhatsaṃhitā (Kūrmāvibhāga). This is founded on the work of Mr. Fleet in Ind. Ant., vol. xxii, and with it are now incorporated references to the similar article in the same journal (vol. xxviii) by Dr. J. E. Abbott, of Bombay, on the names in the Bhāgavata-purāṇa, and further fresh material from the epics and from the Viṣṇu-purāṇa. The importance of the classical writers and their maps lies, not so much in the correctness of the views about the configuration of India as a whole (though, as Professor Pullé shows, this was sometimes better than that of mediæval writers), but rather in the fact that they occasionally help us to the identification of places mentioned, under names now forgotten, in Indian literature. An example of this is the port Takkola, mentioned in the Milindapañha (359 ad fin.), which was identified by the present writer from Ptolemy as *Τάκολα ἐμπόριον*. In this connection mention should be made of the coloured facsimile of an unpublished sketch for a map of India by Dr. H. Kiepert, summarizing the results of his studies in the Greek geographers. Here and there the 'process-work,' by which the photographer reproduced the sketch, has made the smaller names rather illegible.

A contribution like the present makes one feel more keenly than ever the want of a comprehensive work on ancient Indian geography, such as Bühler was preparing just before his death. Is it certain that his geographical papers (I well remember helping him with some of them during his last visit to London) have perished?

C. BENDALL.

IBRAHIM IBN MOḤAMMAD AL-BAIHAḲI. KITAB AL-MAḤASIN WAL-MASAWI. Herausgegeben von Dr. FRIEDRICH SCHWALLY. (Giessen, 1900–2.)

This edition (647 pages quarto) is a great monument of patience and skill. The editor has been aided by the

veteran Arabists Goldziher, De Goeje, and Noeldeke; and the work everywhere exhibits accurate knowledge and felicitous conjecture. Arabic texts lend themselves to the exercise of the critical art somewhat more easily than those in perhaps any other language, owing to the stereotyped character of both thought and expression; but still, the singular felicity of many of the restorations contained in this volume gives acute pleasure to those who can appreciate them.

Of the author of the book nothing at present appears to be known except that he lived at the time of Muḳtadir's Caliphate, which ended 320 A.H.; this is inferred from a statement in the book, and confirmed by the nature of the excerpts which it contains, none of which are from writers later than that time. The book is rarely quoted; to the meagre list of citations given by the editor we may add one which occurs in the Nafḥat al-Yaman (dedicated to Lumsden; printed Calcutta, 1881), where the story told in Baihaḳi (p. 44, 11–14) is copied with acknowledgment of the source.

Of the work itself it is difficult to speak with enthusiasm. It belongs to scissors-and-paste literature; it is a commonplace-book, made by the simple process of putting down a number of headings and entering under them any verses or anecdotes which happen to have any bearing on them. Books of this sort appear to have been common from the commencement of Arabic literature, and the taste for them has by no means departed: a collector of our own time, the learned author of the Hadiyyat al-umam (vol. i, Beyrut, 1308 A.H.), threatened to produce a commonplace-book on a scale which would dwarf all its predecessors. Many authors who are highly distinguished in original lines have given their commonplace-books to the world: familiar cases are Mawerdi, Zamakhshari, Ibn Arabi. Some of these collectors confine themselves to a limited class of subjects, such as the moral virtues and their opposites, or religious duties; but others (and Baihaḳi is of this class) wander over almost the whole range of the knowable. The worst sort is that in which

no order is observed; the chief offender in this line is Baha al-din al-Amuli, of whose books, "The Nosebag" and "The Beggar's Bowl," it is impossible to make even a table of contents. Books like Tha'alibi's, in which the matter is arranged according to authors, are not much better, for much, if not most, of the matter is pseudonymous. Many great commonplace-books remain unpublished: perhaps we need not long for their publication. One could wish that Herr Schwally had given his edition the *dos* which usually distinguishes the European edition from the Oriental — an index of proper names. It would appear from the Preface that he is not to be blamed for this omission.

To the European scholar such a work is of interest for one reason only: it may contain information or preserve passages to which posterity would otherwise have had no access; hence these collections deserve some gratitude, just as Greek scholars are thankful to Athenæus and Stobæus. The question how far Baihaḳi adds to what is already known could only be settled by an exhaustive commentary; the editor's notes give occasional guidance in the identification of passages, but are clearly not intended to do more than this.

An exhaustive commentary on the tales and verses which are collected by Baihaḳi would be a work of which the bulk would bear no proportion to its utility. I may give one example.

Page 176 contains *five* quotations on the subject of the Ḥajib or doorkeeper. The editor gives references for the first, to the 'Iḳd and Mustaṭraf. It certainly did not escape him that these two books contain the first *four*: the fifth is given in Ṭiraz al-majalis, p. 91. The fourth runs as follows in Baihaḳi: "A man wrote to *Abdallah* son of Ṭahir the verse—

اذا كان الجواد لـه حجـاب فما فضل الجواد على البخيل

to which Abdallah replied:

" اذا كان الجواد قـليـل مـال ولم يـقـدر تـعـلّل بـالحجـاب

Ibn 'Abd Rabbihi (i, 22) says: "A man came to the gate

of *Abu Dulaf*, where he stood for a while without obtaining admission; he then tried the expedient of sending in a leaf containing the verse—

اذا كان الكريم له حجاب فما فضل الكريم على اللئيم

which elicited the reply:

اذا كان الكريم قليل مال ولم يعذر تعذر بالحجاب
" وابواب الملوك محجبات فلا تستعظمن حجاب بابى

Raghib Ispahani (i, 133) says: "A beggar came to the gate of *Ma'n*, and being shut out wrote to him—

اذا كان الجواد له حجاب فما فضل الجواد على البخيل

Ma'n wrote underneath in reply:

" اذا كان الكريم قليل مال ولم يعذر تستر بالحجاب

Ibshihi (i, 85) says: "A man from *Khorasan* stood at the door of *Abu Dulaf* Al-'Ijli for a time; not being admitted he wrote a note, and managed to get it taken in. It contained the verse—

اذا كان الكريم له حجاب فما فضل الكريم على اللئيم

to which Abu Dulaf replied:

اذا كان الكريم قليل مال ولم يعذر تعلل بالحجاب
" وابواب الملوك محجبات فلا تستنكرن حجاب بابى

In Matali' al-budur (i, 23) the story is told according to the last version, but even this text provides us with the variant تستكثرن for تستنكرن.

The commentator on this one quotation (of two or three lines) will have to decide whether it belongs to the cycle of Ma'n, or of Abu Dulaf, or Abdallah son of Ṭahir; and is confronted with a whole mine of variants. Probably of all these texts Ibn 'Abd Rabbihi's is the best. Baihaḳi

comes nowhere. But it is clear anyhow that in such traditions what is remembered is the one catchword; everything else varies with each narrator.

The question whether the matter contained in books of this sort can be used for historical inquiries is a very difficult one: where the lists of authorities are given (as ordinarily in the Aghani), we can apply the critical principles of the Moslem traditionalists; but where they are not given at all, or given imperfectly, we have no hold on the collectors. Just as the same verse in different collections is apt to preserve only characteristic words, so the same anecdote is apt to preserve only certain names and certain verses; the differences between the different accounts render it impossible to know whether anything actually occurred, and, if it did, what it was. Most of these books contain a story illustrating the cowardice of Abu Dulamah. According to Baihaḳi (520) this poet told the commander Rauḥ Ibn Ḥatim that if he had a horse and 1,000 dinars he would fall on the foe; Rauḥ provided the articles, and the poet then declined to fight, a poetical dialogue ensuing between the poet and the commander, ending with the poet *being excused*. According to the Aghani, Abu Dulamah offered to fight if he were given the horse and the armour of Rauḥ; when he received them he tried to make some verses (including one of those which Baihaḳi assigns to Rauḥ) do instead of fighting; but *Rauḥ was inexorable*, and the point of the story consists in the way in which the poet got the rival champion to leave the field. According to the 'Iḳd (i, 41) the event occurred in the days of Marwan, who at a certain battle offered 10,000 dirhems to one who would fight with a champion on the side of Ḍaḥḥak; Abu Dulamah accepted the offer, started to fight, and then ran away. In the Ghurar al-Khaṣaiṣ (p. 309) the story is made into two, and Abu Dulamah runs into a hole in the earth. In the Asrar al-balaghah (p. 13) the story is again told with fresh variants and fresh verses. If anyone wished to write the history of Abu Dulamah he probably would do best to confine his attention entirely to the Aghani; from the

mutual contradictions of the other forms of the anecdote he might learn that Abu Dulamah had said and done *something*, but little more.

Certainly not all Baihaḳi's matter is quite so hackneyed as this; it is possible that one-third of it may be fresh, though that is perhaps rather a high estimate. The anecdotes and sayings usually centre round interesting figures, Saints, Caliphs, eminent statesmen and poets. About most of these the falsification of history was something like a recognized profession; Yaḳut tells a story of a greengrocer who gave his customers one extra in the half-dozen for an edifying anecdote about Ḥasan or Ḥusain, and doubtless similar liberality was not uncommon. Some lengthy narratives probably first were issued as historical romances, and, indeed, in the Makamas of Hamadhani historical personages sometimes figure. The rhymed prose in these cases is sufficient to show that we are dealing with a work of the imagination; and the same argument must make us condemn some interesting pieces preserved by Baihaḳi as unhistorical. Even though it might be proper to address a Caliph in rhymed prose, he would not hold a dialogue in that style. The process by which the anecdote about a Caliph or governor developed into lengthy romances such as are incorporated in the "Arabian Nights" would be a study of difficulty, but of some interest. Of course the Legends of the Mohammedan Saints add as much to our knowledge of events as those of their Christian brethren.

D. S. Margoliouth.

Genuinae Relationes inter Sedem Apostolicam et Assyriorum Orientalium seu Chaldaeorum Ecclesiam. pp. xlviii + 648. S. Giamil. (Rome, 1902.)

The above work contains a complete account of the correspondence between Rome and the Syrian Churches in the East from the end of the thirteenth century. The material has been drawn from original documents, by far the greater number of which are here published for the

first time. A few small interesting Syriac texts are also included. The editor has a useful appendix, dealing with the history of the Syrian Church on the Malabar Coast, and with its rites and liturgies down to the Synod of Diamper in 1599. The Abbé Giamil's work is a welcome and careful contribution to a history of which little is known, and will be read with interest in a wide circle. The smaller circle of Syriac students will also find many valuable notes on obscure points of Syrian biography, geography, and literature.

THE BOOK OF JUBILEES, OR THE LITTLE GENESIS. Translated from the Editor's Ethiopic Text, and edited, with introduction, notes, and indices, by R. H. CHARLES, D.D. pp. lxxxix + 275. (London: A. & C. Black, 1902.)

The present work forms the sequel to the critical edition of the Ethiopic version of the Book of Jubilees published in 1895, and would probably have appeared some six years ago had not the author felt, as he himself tells us, that he had "failed to give a satisfactory interpretation of the text." The difficulty lay in his adhesion to the generally accepted view that Jubilees was written in the first century of the Christian era, a view which Dr. Charles, with his intimate acquaintance with allied writings, found to be untenable. The new theory, which is also held by Bohn and Bousset, obliges us to thrust back the date before the first century B.C., and with it the greater part of the difficulties can be successfully overcome.

The book derives its name from the chronological arrangement which divides the history of the world, from the Creation to the Lawgiving on Mount Sinai, into periods of forty-nine years each. Apart from Greek, Latin, and Syriac fragments, the book has been preserved in its most complete form in Ethiopic, but that it was originally written in Hebrew (not Aramaic or Greek) appears certain on several weighty grounds, and is undisputed. It seems to have been the work of a Pharisee, probably a priest, living at the close

of the second century B.C.; and, as the writer of the canonical Book of Chronicles treats the history of his people from the point of view of the late Priestly schools, so the author of Jubilees, a staunch Maccabean, in his endeavour to defend the national religion against Hellenism, writes the earlier history from the religious standpoint of his time.

Consequently the importance of this work cannot be overestimated. It is, as it were, a paraphrase or Targum on Genesis and Exodus, and by its endeavour to solve difficulties, and by supplying gaps, it appears as the oldest commentary in the world. Many details, names, places, and events are preserved here only, or occur here for the first time. Much was evidently preserved in current tradition that failed to find a place in the canonical books, and floated down the ages to turn up again in an early Christian writer or Jewish chronicle. A number of the proper names have still preserved their original Hebrew type (Barâkî'êl, Dânêl, 'Azrîâl, etc.), although in many cases, in the transmission from Hebrew to Greek, and thence to the Ethiopic, the name has been so metamorphosed that even a conjectural restoration seems hopeless.[1] Several new examples of the familiar onomatopœtism in the giving of names appear in Jubilees,[2] one of many indications of the original language of the work.

The light which Jubilees throws upon Judaism in the second century B.C. is particularly valuable. It exhibits "the further developments of ideas and tendencies which are only in their incipient stages in the Old Testament," and thus helps to bridge the gulf that separates the post-Exilic

[1] Of these Nê'êlâtamâ'ûk (vii, 14)—for the second half cf. viii, 6—is probably Nahalath-Maachah ('inheritance of Maachah'), and Ma'anîsâkîr (xxxiv, 4), in view of the variants (p. 202, table, No. 7), seems to have been derived from 2 Sam. xvii, 27 (Shobi, or Machir, of Mahanaim ?).

[2] E.g., iv, 15 (*Jared*, in his days the angels . . . *descended* [*yārĕdū*] on the earth); cf. viii, 5, 8; xi, 6, 12, etc. Another probable example has been overlooked in xx, 13 (and these *mingled with each other* [√ערב], and their name was called *Arabs* [ערב]). In xvii, 14 something is wrong with the text ("he called his name Nebaioth, for *she* [!] said: 'The Lord was nigh to me when I called upon him'"). We expect to find a play upon the word Nebaioth (explained in the *Onomastica* to mean 'prophesying'); on the supposition that it is not in its original place, it may have once referred to Ishmael (Gen. xvi).

age from the beliefs that formed the background of the New Testament teaching. Finally, to the textual critic, the material is rich and suggestive. Paraphrase or commentary though it may be, in many places it follows the Biblical text so closely that any deviations from the latter must be viewed, not as due to the idiosyncrasy of the writer, but to the circumstance that the Hebrew text he was following differed from the later received or Massoretic text. This is conclusively proved by the discovery that in nearly every case the divergence is found to be supported by one or more of the older versions, notably the Septuagint, and Dr. Charles has very rightly taken special care in his notes to indicate the extent of the textual variations. His summary of the results (discussed at length in § 10, pp. xxxiii–xxxix) are important enough and of sufficient general interest to quote.

"Our book represents some form of the Hebrew text of the Pentateuch midway between the forms presupposed by the LXX and the Syriac." If to this it is added that, so far as has been observed, "(1) it never agrees against all the rest [the Targum of Onkelos, the Latin Vulgate, the Syriac] with the Massoretic, which is in some respects the latest form of the Hebrew text; (2) that it agrees in a few cases with Onk., oftener with the Vulg., and still oftener with the Syr., and oftenest with the LXX, against all the rest; (3) that, when it enters combinations, it is almost universally in attestation of the earlier reading, it may be reasonably concluded that the textual evidence points to the composition of our book at some period between 250 B.C. (LXX version of Pentateuch) and 100 A.D., and at a time nearer the earlier date than the latter."

Invaluable as Dr. Charles' collection of material certainly is, a closer and more critical study of the evidence from first-hand sources is still to be desired for a more rigorous investigation of the pre-Massoretic text of the Pentateuch. It is not enough to cite 'LXX' when, as occasionally happens, the leading MSS. differ (e.g., Jubilees, xlvi, 14 agrees with the Vatican, but not with F.'s text of Ex. i, 11), and references to the Syriac, if Lee's edition is intended, are not always conclusive. No doubt completeness in this particular point is unnecessary in a work of this nature.

The subject is one that is capable of further development, and in his commentary Dr. Charles has laid a very substantial foundation for future workers.

The Translation and Commentary as a whole, and the excellent Introduction that precedes it, are far in advance of previous editions, and are marked by that clearness and scholarship which one is accustomed to look for, and to find, in Dr. Charles' works. His notes throughout are extremely helpful and clear; some of them, as that on the later history of the myth in Gen. vi, 1–4, are veritable monographs. This class of literature, the study of which he has made so pre-eminently his own, has too long been neglected, and his series of commentaries on books which rank second to the canonical writings of the Old and New Testament are indispensable to everyone who is interested in early Christian and Jewish literature.

S. A. C.

THE DÎWÂN DES 'UMEIR IBN SCHUJEIM AL QUṬÂMÎ, herausgegeben und erläutert von J. BARTH. Mit Unterstützung der kaiserlichen Akademie der Wissenschaften in Wien. (Leiden: Brill, 1902.)

It has long been recognised that for a thorough knowledge of the classical Arabic language, and for the understanding of the poetry and life of the ancient Arabs, the careful editing of the Dîwâns and collections of poems that have been preserved is a necessary preliminary. A large proportion of this work has already been done, and the industry at present being expended on it, especially by German scholars, will soon carry it to completion. Professor Barth, of Berlin, gives us in this volume the Dîwân of 'Umair bn Shuyaim al Quṭâmî, carefully edited, and furnished with introduction and notes.

Al Quṭâmî, as he is generally called, was a poet of the early Omayyad period. Of the date of his birth there is no record, and Ḥaji Khalfa alone mentions the year of his death as 101 A.H. With this, however, agrees generally

his period of poetical activity as determined by historical references in his poems. These, so far as they furnish any data, are placed by Professor Barth between 66 and 90 A.H. He belonged to the tribe of Taġlib, who dwelt in North Mesopotamia, between the Khâbûr, Euphrates, and Tigris. He was thus a fellow-tribesman of his more brilliant contemporary Akhtal. Curiously enough, however, while many of his poems deal with historical events and tribal feuds of which Akhtal and Jarîr were the poetical champions, there is scarcely a reference to either of these poets in his Dîwân. Possibly they were too far above him in the art. Quṭâmî does not rank with the foremost poets. Some of his verses were, however, much admired. In particular the commencement of the Qasîda which stands first in this edition was regarded as extremely happy.

إِنَّا مُحَيُّوكَ فَاسْلَمْ أَيُّهَا الطَّلَلُ وَإِنْ بَلِيتَ وَإِنْ طَالَتْ بِكَ الطِّيَلُ
إِنِّي اهْتَدَيْتُ لِتَسْلِيمٍ عَلَى دِمَنٍ بِالْغَمْرِ غَيَّرَهُنَّ الْأَعْصُرُ الْأُوَلُ

"Ye marks of former encamping, we give you hearty salute;
So hail! tho' worn ye may be; tho' long and protracted the years.
See, I have come to salute, in Ghamr the vestiges old,
Which seasons long passed away have caused to alter and change."

Akhtal is said to have envied him this opening, and an unnamed authority declared it to be the most felicitous commencement of a Qasîda composed by any Islâmi.

Apart from literary considerations the poems of Quṭâmî are of great historical value, as throwing light on the condition of Mesopotamia during the sixties and seventies of the first century of the Hijra. This was the period during which the Omayyad dynasty was struggling to maintain itself, and to assert its right to rule over the whole Moslem world. Upper Mesopotamia was at this time the scene, not only of struggles for empire, but also of many 'battles of the crows' in the shape of tribal feuds. The advent of

Islam by no means put an end to jealousies between the Arab tribes. There was a wide-extending division of the clans into North Arab and South Arab or Yamanite tribes. At the battle of Marj Râhiṭ, 64 A.H., the Southern tribes, especially the Banu Kalb, aided Merwan, while the Banu Qais and the Northern took the side of Ḍaḥḥâk. After Merwan's victory here, Zofar bn al-Ḥarith, who had sent auxiliaries to Ḍaḥḥâk from Qinnesrin, where he was governor, fled to Circesium, and aided by the Qais established himself there. 'Umair bn al-Ḥubâb, another Qaisite leader, made his peace with Merwan, and accompanied Ubaid Allah bn Ziyâd on the expedition which he led for the subjection of Mesopotamia. But at the battle of the Zab he deserted to the enemy, and brought disaster to Ubaid Allah's army. After this 'Umair continued in Mesopotamia, making himself very uncomfortable to the Banu Kalb and other Yamanite clans in that neighbourhood. Zofar too, from Circesium, joined in harassing the Kalb, who seem to have been compelled to migrate from that district.

The Taġlib, to whom Quṭâmî belonged, were, like the Qais, a North Arab tribe, and were at first on good terms with them. But the predatory habits of 'Umair's followers, added to disrespect for the religious sentiments of the Taġlib, who were mostly Christians, led to ill-feeling, and in the end to skirmishes. Zofar seems to have exerted himself to maintain the good understanding between the two tribes, but 'Umair was not disposed to be conciliatory. He prosecuted the feud against the Taġlib vigorously, and inflicted a severe defeat on them at Mâkisîn. Zofar seems to have given him only half-hearted support. He took part in the next important battle, that at Ḥashshâk (70 A.H.), which appears to have lasted three days; but before the end he withdrew to Circesium. In this battle 'Umair was slain, and his death could not remain unavenged. Zofar, though at first reluctant, marched against the Taġlib and routed them at Kuḥail.

The course of these feuds is sketched with careful citation of the relevant literature in Professor Barth's introduction. Quṭâmî himself took part in some of the battles. Almost

the only historical fact related of him, outside his own poems, is that at the battle of Mâkisîn he was taken prisoner, and his herds carried off as spoil. By the influence of Zofar, however, he was set free, and received back his property, with a present added over and above. This is amply corroborated by his poems. In IX, for example, he directly attributes the saving of his life to Zofar and his two sons. Several of his poems are devoted to a eulogy of this Qaisite leader, while 'Umair is characterised as far beneath him. Quṭâmî's attitude is thus somewhat peculiar. He expresses regret at the enmity of the related tribes (XIII), and boasts of his connection, not only with the Taġlib and Rabi'a stems, but with the North Arabs in general. This attitude is probably to be explained by the conciliatory spirit of Zofar towards the Taġlib in general, and his kindness to the poet personally. Besides Mâkisîn, Quṭâmî took part in at least one other battle, probably that at Raḥûb. Here, in the year 73 A.H., after Abd al Malik had established his power, and the feud between the Qais and Taġlib was apparently at an end, Jaḥḥâf, a Qaisite leader, stung by verses of Akhtal, treacherously fell upon the Taġlib and slew a large number of them. Akhtal was also present at this battle, and the only references to him in the Dîwân charge his family with cowardice compared with the bravery of Quṭâmî's own clan (V and XXIII). In addition to the poems directly referring to these feuds the Dîwân contains eulogies on Abdul Wâhid (probably the cousin of Abdul Malik) (I) and on Asmâ' bn Kharija (III and XVII), and an unfavourable comparison of Muhallab with Ḥudhail, a Taġlibite leader (VII).

Enough has been said to indicate "the close connection of Quṭâmî's poems with important historical events in Mesopotamia," and to show that the publication of the Dîwân is abundantly justified. Apart from this, philologists will welcome this careful edition of a poet who, if not of first rank, is of no small intrinsic merit and linguistic interest.

The Dîwân is preserved in an exceptionally old MS. in the Berlin Library, dated 364 A.H.—if I mistake not, the oldest Naskhi MS. in the library. Another recension is represented

by a MS. in Cairo, of which Professor Barth procured a copy, which, however, was almost entirely without vowels. During the printing he had the use of a second copy of the same. The two recensions differ to some extent in the order of the poems, and in certain omissions and inclusions; but apparently not beyond the extent of the variations with which students of Arab poetry are familiar. Naturally, the Berlin Codex was made the basis of the edition, and the short scholia which it contains are printed entire. (As to the authorship of these, Barth finds Ahlwardt's suggestion unsuitable.) Extracts from the scholia of the Cairo MS. are printed in brackets where they give anything additional. While following the Berlin MS. Professor Barth exercises his judgment in adopting readings from the Cairo version and elsewhere. Occasionally he ventures to suggest a reading. With such judicious treatment of the text of such a Dîwân, there is some confidence that we have the poems in their original form, whereas in the case of the older poems, which were probably also more frequently in people's mouths, there is not much confidence in going beyond the different recensions in which they are found. Still, Quṭâmî is by no means free from the transposition and interpolation of verses, which occur so frequently in Arabic poetry. Preceding the notes to the separate poems, under the rubric "Zur Composition" Professor Barth gives reasons for regarding certain verses as standing in their wrong order, or as having been interpolated. The notes are brief, but cite many parallels in the usages of words and similarities of imagery, and give much help for the understanding of the text. If fault were to be found it would be that Professor Barth does not give us enough, and one often wishes that he had been more generous to his readers' ignorance—a desire which, considering the amount of special study necessary to understand Arab poetry, is surely excusable. These notes, together with the collection of various readings, culled from the Cairo MS., and from the verses cited in the Kitab al Aghâni, the Khizânat al Adab, the Lexicons, and other works, which are given in the footnotes, must have involved

a great deal of research. The edition is an excellent one; and no one will grudge Professor Barth the thanks which Orientalists will bestow on him for a work which they know must have entailed a great deal of labour. Their thanks are due also to the Imperial Academy of Sciences in Vienna, by whose support the Dîwân has been published. Brill, of Leyden, as publisher, is guarantee of beautiful type and careful printing. The misprints we have noticed are few and of small importance.

[De Goeje's review of the work in the Z.D.M.G. (1902, pt. iii), which came to hand after the above was written, suggests a number of improvements in the text.]

RICHARD BELL.

THE SIXTH BOOK OF THE SELECT LETTERS OF SEVERUS, PATRIARCH OF ANTIOCH, in the Syriac Version of Athanasius of Nisibis. Edited and translated by E. W. BROOKS, M.A. Vol. I (Text), Part 1.

This is the first instalment of the work promised by the Text and Translation Society, formed about two years ago with the aim of making available more of the MSS. of the British Museum, though not confining its attention to that collection. The British Museum possesses eight MSS. of various works of Severus of Antioch described by Dr. Wright in his Catalogue of the Syriac MSS., the last two of these being imperfect copies of the Selected Letters. Mr. Brooks has very carefully compared these, and supplied parts wanting in both of them from two other British Museum MSS., from one in the Laurentian Library, and from a Paris MS. He promises in Vol. II to give an introduction dealing with the work of Severus together with his translation.

The letters are without date and address, a serious omission to Western eyes and one impairing their use as a contribution to history. Easterns, however, regard accurate details of this sort as unimportant, and in such writings as these value either the style or the doctrinal sense. The Letters, however,

probably belong to the short Patriarchate of Severus—he was consecrated in A.D. 512 in the place of Flavian, and exiled by Justin in 519—rather than to the twenty years of exile which followed, for they are addressed chiefly to the bishops, clergy, and monks under his rule, and treat of various questions of Church order. One frequently recurring subject is that of ordination: in Letter 1 Severus lays down in what instances canons forbidding a bishop to ordain outside his own diocese may be set aside; he rests his argument on well-known precedents and quotes Gregory Nazienzen. Obviously, when tenure of a See depended largely on the views adopted by the Emperor for the time being, and bishops were liable to sudden yet protracted exile, questions of succession to office in the line of those of the same opinion were peculiarly important.

In the same letter the Monophysite Patriarch gives a clear statement of his doctrinal position and of his reasons for rejecting the Tome of Leo and the Council of Chalcedon, which he accuses of reintroducing the errors of Nestorius. Though definite and clear in his statements the moderation of Severus is admirable, especially in a time when no bitterness of language was considered too harsh for those who held different opinions. Indeed throughout, the letters are remarkable for their moderate and courteous tone. When, having (in Letter 30) exhorted the clergy of Apamea to choose an *orthodox*, i.e. a *Monophysite* bishop, Severus has soon to write again (Letter 39) because they were divided, and names submitted to him by some of them were judged by him unsuitable, it is most gently that he requests them to approve his nomination of the presbyter Cosmas. Then Letter 48 to his friend Philoxenus, Bishop of Mabbogh, soon like himself to be exiled for his opinions, is an example for the dignified yet deferential manner in which he asks counsel as to whether forgiveness should be accorded to some who were accused of having obtained ordination by bribery, but pleaded ignorance of the canons and that the nature of the gifts had been misunderstood, and for the impartiality with which he states both sides.

Other letters, also on ecclesiastical subjects, are addressed to various imperial officials.

J. P. MARGOLIOUTH.

GUJARATI BOOKS.

1. VEDĀNT DARṢAṆA AND OTHER ESSAYS. By VISHVANĀTH P. VAIDYA.

This is a small book containing four essays on Vedantism, translated into Gujarati or written in that language. The present book is the third edition of these essays, which originally appeared in a journal conducted by Mr. Vaidya. The first of them is a translation of Dr. Deussen's paper on Vedantism, read before the Bombay branch of our Society. Professor Deussen's view on this branch of Sanskrit literature are very well known to European scholars.

The second essay is a biographical sketch of Mr. Gourishanker Udaiśhanker, the late Dewan of Bhāvnagar. Mr. Gourishanker was a competent administrator, and at the same time a philosopher. We have learnt something about him as a philosopher from two papers contributed by the late Professor Max Müller to the *Nineteenth Century*, and as an administrator from a paper recently written by Sir John Jardine.

The third essay is an original attempt at explaining in short the main idea of Vedantism, viz. the unity of the Supreme and the individual soul.

From the historical point of view the last essay is the most important. This is a translation of a Sanskrit poem by Śankarācārya. Śankara in this small poem, called Maṭhāmnāya Setu (a bridge to the monasteries and traditions), gives a short sketch of his order. He explains how he founded four monasteries in the four directions of India, and how they were to be conducted after him. He gives some very short but imperative rules, which are worth studying by scholars of the religious life of India.

2. Suśruta Āyurveda. Edited by the late Vaidya Prabhuram, assisted by his son Mr. Vishvanāth P. Vaidya. (Bombay, 1902.)

We have had before now several editions of Suśruta, almost all of them published in Calcutta. The present edition has the advantage of being prepared by a scholar who made medicine his lifelong study, and was known in Western India as an authority on Sanskrit medical works. The edition is a very carefully prepared one, with the different paragraphs distinguished by appropriate headings. Mr. Vaidya seems to have spared no labour to make it as useful as possible to such students of medicine in India (where there are even now many people who depend for their medical practice on this and similar Sanskrit works) as are familiar with Gujarati. For this purpose Mr. Vaidya has had the whole work translated into that dialect by a pandit under his own supervision. Mr. Vishvanath Vaidya has prepared an exhaustive index to the whole work, which is annexed thereto.

The book is very well got up, printed in beautiful type at the Nirneyasagar Press, Bombay. Facing the title is a picture of Vaidya Prabhuram, the editor, who died, we regret to say, in April last, just on the completion of this his last work.

Délégation en Perse. Mémoires publiés sous la Direction de M. J. de Morgan, Délégué Général. Tome IV: Textes Élamites Sémitiques, deuxième Série, accompagnée de 20 planches hors texte, par V. Scheil, O.P., Professeur à l'École pratique des Hautes-Études. Folio. (Paris: Leroux, 1902.)

There is hardly any doubt that this volume contains the great discovery of the year, and, on this account, is worthy of special mention. The object in question is the splendid stele of Hammurabi, not only giving a picture of that king

more perfect than the remarkable slab discovered by Mr. Hormuzd Rassam, but inscribed, moreover, with his code of laws. Out of a total of 200 pages, no less than 152 are devoted to this monument, which is bound to attract the attention of all scholars, and is of special interest to students of ancient law.

There are other inscriptions in the volume—short texts of Naram-Sin, son of Sargon of Agadé, who reigned, according to Nabonidus, 3750 years B.C.; Karibu ša Šušinak, patesi of Susa, and governor of Elam, who "judged a righteous judgment in Elam," and restored and decorated the gate of Šušinak in his capital. Inscriptions of the Babylonian rulers Dungi and Gimil-Sin follow, with brick-inscriptions of Kal-Ruḫuratir, . .-badi-dimma, and Adda-pakšu. These inscriptions are at the beginning of the book, and at the end are texts of other kings—Meli-Šiḫu, whose monument has an inscription of Šutruk-Naḫḫunte; Burra-Šuqamuna, a Kassite; and a ruler named Tepti-aḫar. There are also a number of Elamite trade-documents of considerable value. These are unfortunately not dated, but were probably drawn up about 1500 B.C. A short inscription of two lines is not translated, probably because it was not considered worth it. It is of Nebuchadnezzar.

We now return to the important part of the work, the laws of Ḫammurabi, which forms its kernel. This monument is a tall conical stone more than seven feet high, having at the top a bas-relief representing that king before Šamaš, the god of justice among the Babylonians and Assyrians. The latter is seated, looking to the left. He wears a flounced robe and pointed hat adorned with four horns (eight in all, reckoning the off-side), and holds, as usual, a circle and a rod in his right hand, his left being held against his breast. Ḫammurabi, who is standing, looks to the right (facing the god), wearing a globular-crowned hat with a thick brim. He seems to be in conversation with the god. He is clothed with a mantle which leaves the right shoulder bare, and his hand is raised in the usual conventional attitude when before a deity.

Excellent as this bas-relief is, it is the inscription which is the important part of the monument. According to Professor Scheil's estimate, the code of laws with which it is inscribed must have contained no less than 280 clauses, and is the most remarkable document of its class yet found. With the introduction and the concluding peroration, it has no less than 3,638 lines of writing in all, and before the erasure of a portion by a later king, 4,000 lines, more or less, must have been the original number. It is true that the lines are short, but even so the text which they contain is considerable.

As may be easily imagined, the laws inscribed thereon are of a most diverse nature. It begins appropriately with enactments upholding the authority of the law, and then goes on to deal with property, child-stealing, fugitive slaves, brigandage, theft, the care of the property of an official on service, farming taxes, etc. Of special interest are the laws concerning property held in virtue of an official position, borrowing money to carry on cultivation, the women who sold drink, the distraint of the person of a debtor, a wife's justification for quitting her husband, breach of promise, the children of prostitutes and other similar people, physicians' fees and penalties for an unsuccessful operation with injury to the patient or death, a builder's fee and penalties if injury or death of tenants took place in consequence of jerry-building, etc. From the Old Testament point of view, however, it is probably the laws for assault which will attract the most attention, an eye for an eye, a member for a member, a tooth for a tooth, being specially stated.

There are, naturally, in the extensive collections of the British Museum and other institutions a large number of contracts and legal documents which illustrate this early Babylonian code of laws, and are, in their turn, illustrated by it. Thus the inscription translated in the Journal of the Royal Asiatic Society for 1897, pp. 593–595, probably refers to § 178, from which it would seem that a priestess (for such the two women in that text probably were), if her brothers would not make her a satisfactory offer with regard to the

management of her property, could let her farm to a farmer who would manage it for her and give her the proceeds, her brothers taking it after her death.

The invalidity of marriage without a contract (§ 128 of the code) is illustrated by the J.R.A.S. for 1899, pp. 106–108, which also gives the punishment of a faithless wife as being death by throwing down from a tower (?), instead of drowning, as in Ḫammurabi's code and the tablet of Sumerian laws (cf. J.R.A.S., 1899, p. 109). § 177 makes a woman's second husband trustee of the children of the first husband, and it is probably this law which is illustrated in J.R.A.S., 1899, pp. 118–120. Naturally the stepfather lost his case, as he clearly had no right to his wife's female slave, nor to her property in the city Buzu.

The case of the runaway slave of which I have given a tentative rendering on p. 110 ff. of the same volume of the Journal seems to be in part an illustration of the law which Professor Scheil has numbered § 280 :—

"If a man has bought the male or female slave of a man in another country, when he arrives in the midst of his own country, and the master of the male or female slave recognises his male or female slave, if that male or female slave are children of the land (i.e. natives), he will give them their freedom (so Scheil) without money" (i.e. compensation).

In the J.R.A.S. for 1899 (see p. 111) a slave named Arad-Bunene had been sold into the country of Ašnunna, where he served five years, and then escaped into Babylonia. On his return he was recognised by two officials who wished to intern him in what seems to have been a place set apart for slaves having no master. His three brothers, however, opportunely put in an appearance and protested against the action of the officials, claiming him to spend the remainder of his days in doing his father's work along with them. This was agreed to, and the matter thus settled satisfactorily.

Of course this is not an exact parallel, but there is hardly any doubt that its settlement in this way was based on some general rule recognised in such matters. An

escaped slave from a foreign country naturally belonged to nobody, just as one bought in a foreign country and afterwards recognised by his old master could hardly be claimed by him, as that would have been unfair to the person who had brought him home, but the latter, it was recognised, had no *legal* right to him. The law therefore said that he should go free. It is noteworthy that in such a case he did not come under the law of fugitive slaves (§ 17), but under that of purchased slaves.

A magnificent text and a magnificent publication. It is moreover difficult to decide which to praise most—the French Government for its liberality in sending a mission to Persia and for publishing the results, or Professor Scheil for so rapidly making and giving to the world his really excellent translation. The highest honour is due both to the French Government, to M. de Morgan, the director of the excavations, and to Professor Scheil; and not only Assyriologists, but the learned and legal world at large will address to them their best thanks for such a noteworthy addition to our knowledge of the past. And all students of the ancient Semitic East will wish them the same good fortune in their future work.

T. G. PINCHES.

PRÉCIS DU DROIT EGYPTIEN, COMPARÉ AUX AUTRES DROITS DE L'ANTIQUITÉ, par E. REVILLOUT. Two vols., 8vo. (Paris: Giard et Brière, 1903.)

As a solid piece of work by one of the most celebrated and hardworking of Egyptologists and demotic scholars, who has also made a speciality of ancient law, this book will prove one of the most valuable that have been issued. Together, the two volumes contain no less than 1,651 pages (the pagination from the first being continued in the second), and it is therefore a very substantial work, especially if the twenty pages of introduction be added.

It is divided into five parts, under the headings *Etat des biens, Etat des personnes, Les obligations et le droit commercial,*

Les actions, and *Economie politique*. The book is one of no common interest, for it not only indicates the legal aspect of the judicial systems treated of, but gives also an exceedingly complete view of the state of society. From it we gain an idea how absolute was the law of the family in Egypt with regard to inheritance—for a father could not disinherit his son; and we see how, in conformity with the statements in Genesis ("as yet contradicted by nothing"), all the land became invested in the king, except the temple domains, which the priests retained. By this, as may be well imagined, the people of the land (the landholders) "were, in fact, neither free nor serf—generally—in the Roman sense of these words." They were, in fact, *conditionals*, that is, "men whose duties and rights were fixed in advance by their social condition." And it would seem to be a proven fact, that this has an important bearing on the question of castes (not by any means so strictly defined as in the Indian acceptation of the word), for it must have been the cause of the same profession, trade, or calling remaining generation after generation in the family, as numerous documents prove. Professor Revillout shows that the word *caste* is hardly the right one to use in this case, but the most suitable substitute for it is, naturally, a matter of opinion. He likens the Egyptian castes, in a manner, to the Levites in Israel, instituted by Moses, as he suggests, in imitation of the priestly caste in Egypt. The question of marriage is likewise one of great interest, which the author also treats very fully. Noteworthy is what the author calls "*the year of cohabitation*, the first year of marriage, forming a kind of noviciate, and to which the annual allowance specially referred in the Demotic contracts."

But one might go on culling interesting facts from this work far beyond the available space. Among the general reflections of the author may be cited his introductory remarks to the section treating of commercial law, in which he compares the Egyptian system with the Roman, to the great disadvantage of the latter. It is unfortunate that the origin of the judicial system in Egypt is so obscure, as it

would have been of considerable interest to the reader to have the author's reflections thereon, with the same kind of comparison as he has given in other parts of his work. In conclusion, it may be noted that the book is not by any means dry, its different sections being broken up by numerous translations from the original documents, which are, in themselves, descriptions at first hand of the life of the people, and faithful reflections not only of their laws but also of their family life. Such a welcome contribution to our knowledge of life in Egypt is worthy of the fullest success.

T. G. PINCHES.

DIE RELIGION BABYLONIENS UND ASSYRIENS, von MORRIS JASTROW, Jr.; vom Verfasser vollständig durchgesehene . . . . deutsche Übersetzung. 1 Lieferung. 8vo. (Giessen: Ricker'sche Verlagsbuchhandlung, 1902.)

The English edition of this book, "The Religion of Babylonia and Assyria," was noticed by the present writer in the Journal of the Society for 1899, pp. 458–461. The present translation into German, when completed, will be an entirely new edition, not only revised, but modified and thoroughly brought up to date. The whole will consist of ten parts, to be issued within a year. The present first portion contains three chapters and part of the fourth. These deal with the sources and the method of investigation; the country and the people; the general characteristics of the Babylonian pantheon; and the Babylonian gods before the period of Ḫammurabi.

In its earliest form known to us, the author says, the Babylonian religion may be best described as a place- and nature-worship (*Orts- und Naturkulten*). There is no doubt that there is every probability that this description of one phase of its development is correct, cities, like Sippar and Opis, and rivers (e.g. the Tigris) being invoked as if they were living beneficent powers, whilst divinities named after trees are sufficiently numerous, and the gods of the sun,

the moon, the stars, fire, thunder, lightning, the deep, the sea, rivers in general, etc., etc., are often mentioned in the inscriptions by name.

From the group of inscriptions which have furnished the author with the material for the fourth chapter (deities before Ḫammurabi), about sixty-six in all, serviceable though short monographs of En-lil or Bêl, Nin-lil or Bêltu, Nin-khar-sag, Nin-gir-su, Bau, Ga-tum-dug, En-ki or Êa, Nin-a-gal, Nin-ki, Nergal, Shamash, Â, Nannar or Sin, Innanna, and Ninâ are given. The first of these, he says, is in Babylonian theology 'the lord of the Underworld,' representing, so to say, the unity of the various powers, whose place and centre of activity were thought of as being on the inhabited portion of the globe as well as under it. Only a portion of the history of this divinity, as of the others named, is given in the present part of the work, the development of the remainder being reserved for that portion which deals with his becoming the principal god of the underworld, and his identification with Merodach, which, as is generally admitted, was in consequence of the rise of the city of Babylon to the position of chief state of the confederacy.

In accordance with the plan of the work, the descriptions of the deities, as already remarked, are only carried down to the time of Ḫammurabi, and will be continued in the succeeding chapters of the book. This would seem to be a disadvantage, but from what has been stated it will be seen that, as far as our knowledge goes, it is very thorough, and, if one may judge from the eighty pages now before us, an advance upon the English edition. Its completion will therefore be looked forward to with interest, and the author is to be congratulated upon the success which the work has hitherto had, especially as it has called forth this improved German edition.

T. G. Pinches.

THE DISCOVERY AND DECIPHERMENT OF THE TRILINGUAL CUNEIFORM INSCRIPTIONS. By ARTHUR JOHN BOOTH, M.A. 8vo. (Longmans, Green, & Co., 1902.)

This excellent record of discovery and decipherment is one of the most interesting and valuable books of its kind ever published, and fills up a real gap in the literature of the important subject with which it deals. As will be remembered by every member of this Society, Cuneiform decipherment is intimately bound up with the Society's early work, and the labours of one of its most illustrious members, namely, Sir Henry Rawlinson, to whose industry, energy, and courage so much of our knowledge of Old Persian, Elamite, and Semitic Babylonian is due, were published in its Journal. In fact, this book may be called one of the romances of archæological and philological discovery, and as such, will attract the attention of the modern reader probably as much as the most attractive book of travel.

The work is divided into six chapters, and begins with the first discovery—that is, of which any record is made —of the Achæmenian ruins and inscriptions by Barbaro, a Venetian ambassador, in 1472. The Portuguese missions, Pietro della Valle (1621), Sir Thomas Herbert (1627), Kaempfer, a German physician, who first described the inscriptions as 'cuneiform' (1712), and, with Le Bruyn, made the first copies of them; Niebuhr, Ouseley, Ker Porter, Rawlinson, Dieulafoy, Lord Curzon—these and many other celebrated explorers, down to De Morgan at the present time, all find their place in the work, and furnish the text for numerous excellent descriptions. Not less interesting is the history of the decipherment, first of the Persian, later on of the Elamite, and finally of the Semitic Babylonian or Assyrian. It is worthy of note that it is a hundred years this year since Grotefend deciphered the names of Hystaspes, Darius, and Xerxes (1802). Here, too, one is glad to see, that not only are some less known and more modest workers in the field referred to, who contributed their quota (like St. Martin and Rask), but the

British decipherers, Rawlinson, Hincks, and Norris, receive likewise their due. Since the completion of the Persian Cuneiform alphabet many have worked at the language, not least among them being Jules Oppert, who has also done excellent work upon the Elamite syllabary, in which Westergaard, Hincks, De Saulcy, and Norris had been his predecessors.

The last chapter of the book is devoted to the third or Babylonian column of the Persian Cuneiform inscriptions, and is fully as interesting as the others. In this, also, Grotefend seems to have had the first success, his spelling out of the name of Darius being correct, "both in the cursive and lapidary forms." He was unable, however, to continue the work, so it fell to the lot of that wonderful Irishman, Hincks, who began by drawing up a list of seventy-six cursive characters from a fragmentary duplicate of the India House Inscription which he had recognized (this identification was, of itself, at the time, a most acute thing to have done), placing opposite each its equivalent lapidary sign taken from the stone of Nebuchadnezzar referred to. The task in England of deciphering the enormous collections of tablets and other inscriptions which began pouring in from the excavations of Layard, Rassam, and Loftus, was divided between Hincks and Rawlinson, assisted by Dr. Norris, who also became an Assyriologist of repute, whilst Dr. Samuel Birch and Sir Henry Layard gave most valuable aid in the publication of texts. In France Assyriological decipherment was taken up by Botta, Löwenstern, and De Saulcy, whose work, however, was soon eclipsed by that of Professor Oppert, the present father of the study. Grotefend still continued the work in Germany, but this was the period of his decline, and he added but little to the general progress. From that time to this, however, beginning with Eberhard Schrader, Germany has added constantly to the number of votaries to the study, which she has made specially her own, and to give even a list of those engaged in it who are of German nationality or of German orgin would take up more space than could be devoted to the subject

here. Besides Germany, France, and England, however, students have come forward in almost every civilized country, especially America, and as time goes on there is every probability that their numbers will increase. It is a pity that in this country the discouragement is so great, and that in learned and literary subjects in general there is a tendency to forget that "the labourer is worthy of his hire."

There is no doubt that all interested in 'Cuneiform research' will wish this interesting book every success. It is thorough and painstaking, and far beyond any work upon the subject that has yet appeared. Lists of Persian and Elamite characters enable the progress of the decipherment to be traced with but little trouble, and the contributions of each scholar to be correctly apportioned. For Assyro-Babylonian it was impossible to do this, the number of characters and workers being too great; besides which, the work is not yet finished. Whether such a description of Assyrian decipherment will ever be compiled, therefore, is exceedingly doubtful; in all probability, if at any time attempted, it will be mainly with the object of showing who first proposed the readings and values of the characters which are acknowledged as correct, but the time for this is not yet come.

There are one or two points in the introduction which may need modification. It can hardly be said that "two very different systems" of writing prevailed in Assyria and Babylonia: the systems in each country were the same, it was the styles which differed, and the Assyrian style does not differ from the Babylonian in most cases so much as the archaic Babylonian and Assyrian scripts differ from what was usually employed at a later date, when the writing in each country had become greatly simplified. It is true that much of the historical literature of Assyria is dry and monotonous, but the records of those most important kings, Sargon, Sennacherib, Esarhaddon, and Aššurbaniâpli, can hardly be described in that way—indeed, they have not seldom pretensions to literary excellence.

With congratulations to the author, we take leave of a most interesting book. T. G. Pinches.

H. HIRSCHFELD. NEW RESEARCHES INTO THE COMPOSITION AND EXEGESIS OF THE QORAN. Asiatic Monographs, Vol. III. 4to; pp. ii + 155. (London: Royal Asiatic Society, 1902.)

In the year 1878 Dr. Hirschfeld published his "Juedische Elemente im Koran," the first study in connection with the Jewish elements which contribute largely to the composition of the Koran. Twenty-five years have elapsed and the author presents us now the ripe fruit of continuous studies and untiring researches. For since that time, the history of the Koran has evidently formed the centre of his studies. Equipped with a profound knowledge of Rabbinical literature and deeply versed in the literary history of the Koran and of its Arabic commentators, Dr. Hirschfeld has brought to bear on his subject freshness of insight, indomitable zeal, and scholarly discrimination. He is abreast of the whole literature which has steadily been growing round the critical investigation and philological exegesis of the Koran, and he is able to give to his subject an original exposition supported by a wealth of documentary evidence hitherto but rarely used by others. The results at which he arrives are as many gains to the understanding of the origin of Muhammedanism and of the Koran itself. For there can be no doubt that many a philological problem, and still more so, many a psychological element, scarcely recognized by the cursory reader, can adequately be solved and appreciated only by those, who combine the knowledge of Arabic with that of Rabbinic, in fact by one whose own religious life is moulded upon the same traditional conceptions, and who has deeply drank from the same well from which Muhammed has drawn most of his inspirations. It is now proved by the author that it is not the Bible pure and simple with which Muhammed has been familiar, but that form of it which has been coloured by the traditional interpretation of the Jewish Sages, and embellished by the legendary lore of old. Just as little as the New Testament can be fully understood without the knowledge of the contemporary

Jewish literature and the so-called Pharisaic tradition and interpretation of the Scriptures, so little will the Koran yield the key of its proper understanding without referring to the same currents of thought and tradition among the Arabian Jews. With them Muhammed lived and fought, their ideas he imbibed, and upon their traditions he based his inspiration. Dr. Hirschfeld shows now how close that dependence upon the Jewish tradition has been. In thirteen chapters the various Suras are examined, and their exact meaning and origin are investigated. The contents are grouped according to the prominent feature which distinguishes them, into confirmatory, declamatory, narrative, descriptive, and legislative revelations. Exceedingly instructive is Chapter viii, "The Parable in the Qoran," with the appendix, "The Mathal in Tradition."

Dr. Hirschfeld does full justice to the poetical style of the Qoran, the originality of the way in which Muhammed used the appropriated materials, and the skill with which he adapted them to often contradictory circumstances. Read in the light of history, as paraphrases and commentaries of contemporary events, foreshadowing or following the actions of Muhammed, the whole of the Koran becomes more vivid, a living chronicle of religious evolution, and not a mere religious code. Special stress must be laid on the footnotes, where the author refers to his authorities, and in which many an important point is explained and many a detail dealt with which could not be introduced into the text itself; e.g., the question of Muhammed's knowledge of the Hebrew alphabet, and the ingenious suggestion that owing to his mistaking a word written in Hebrew characters we get to the real meaning of 'Sura,' which is a corruption from the Hebrew 'Sedra.'

An approximate chronological arrangement of the Suras sums up part of the critical work performed by the author in the exegetical examination of the Suras. Numerous indices conclude this book, which is a mine of information, and will prove indispensable to every student of the origin and history of Islam. Both the author and our Society are

heartily to be congratulated on this book, in which each of them have had a share, the one writing it, the other publishing it as one of their 'Asiatic Monographs.' It is sure to remain the standard work on the subject for a long time to come.

M. G.

PROFESSOR DR. NORBERT PETERS. DER JUENGST WIEDERAUFGEFUNDENE HEBRAEISCHE TEXT DES BUCHES ECCLESIASTICUS, untersucht, herausgegeben, uebersetzt, und mit Kritischen Noten versehen. (Freiburg-i.-Br.: Herder, 1902. 10*s.*)

The interminable Sirach literature has been greatly enriched by the present publication of the Hebrew text, accompanied by an exhaustive Introduction, in which all the problems connected with it are discussed in a lucid and scholarly manner. The nature and character of each of the four manuscript fragments of the Hebrew are described, and the relation studied in which they stand to one another, then the relation in which each of the Hebrew texts stands to the Greek and Syriac version of Ecclesiasticus. Of all the four the one named *C* seems to belong to the oldest and best recension, and is closely allied with *B* and *D*, whilst *A* represents a somewhat different tradition, though all go back to one and the same original. Needless to say that Professor Peters, in agreement with most of the scholars, holds to the opinion that the newly discovered fragments belong to the long-lost Hebrew original. I belong to the minority who still see in these Hebrew fragments a comparatively late translation, and by no means the old original, and I may soon take the opportunity of justifying my position in this question as to the true character of the Hebrew text. For the time being I am merely stating Professor Peters' views, who proceeds in his Introduction to study each of the old versions, notably the Greek and Syriac. He is forced to admit that the tradition of these versions, and more especially the Syriac, is by no means perfect or

absolutely reliable, just as I have long ago contended. In the Syriac we have only the Western recension, very little, if anything, of the Eastern. And even the Western is thus far often in a rather hopeless condition. The question naturally arises, how, then, can we rely on such texts to decide the true value of the supposed original? The critical principles laid down by the author on pp. 76 ff., which guide him in the attempt to reconstruct the older form from the contradictory readings of the fragments, may be very sound and judicious, but if the material with which we have to manipulate is tainted the result cannot be above suspicion. In order to justify his attempted reconstruction the author gives us a most exhaustive study of each word and sentence of the Hebrew, comparing them also with the other versions. It is an excellent *apparatus criticus* adapted to the purpose of explaining the *modus operandi*, and is very valuable as far as it goes to establish the relation of the Hebrew to the other texts. But many strange things are set down there. Thus, we read on p. 52 that the primitive original text was written with the Old Hebrew characters, and that in this way many mistakes of change of letters can be explained. And on p. 31 we get a list of such changes of letters, due either to the "Old Hebrew script or to the square letters"! It is a statement which goes far to shake our confidence in the scholarship of the author. In the critical apparatus many emendations and corrections are suggested, based either on the readings of the other versions or on internal evidence. The author furthermore states in the Introduction (p. 31) that "many hands and many heads have been at work at this Hebrew text until it assumed its actual form." Is there any other old text in existence, I ask now, of which two such contradictory statements could be made in one and the same breath, that it is the work of many and that it still represents or reflects the old original? By saying it "reflects" I am toning down and placing a charitable construction on the meaning of the author's words. For to him it is only the old text, though greatly altered and manipulated under the influence of the

Greek and Syriac versions. Anyone conversant with the old Hebrew literature must decline to subscribe to these theories, though they are shared also by most of those who have made a more or less profound study of the Hebrew fragments. I do not speak now of the philological aspect of the problem—I will deal with it on another occasion—but simply from that of the history of Hebrew literature. I make bold to say that there is no book in existence in the whole range of the Old Hebrew literature which is based on a Greek text, or having originally been written in Hebrew should have been corrected or mutilated or in any shape or form been changed by means of collations with any version whatsoever. Does anyone, acquainted with the old-world notions, believe that Jews, to whom Greek was the language of Antiochus and of the heathen, would correct their own Hebrew writings with the aid of that subsidiary version, which was only a translation of that original of which they were the possessors? To state such a preposterous view is to ignore the actual state of things. Not one of the numerous Hellenistic writings, such as the works of Aristobul or even Aristeas, has ever been translated into Hebrew. The mere legend of the miraculous translation of the Bible into Greek has penetrated into Hebrew old literature by oral transmission. How much less possible is it to believe that a Hebrew book written by a man high in the priestly hierarchy, living in Jerusalem, should have been later on corrected and altered, often without rhyme or reason, out of the Greek and the Syriac, and to have been so much interpolated and changed that it is almost hopeless to make a clear sense of many a passage as it now stands. If we had not the old translations at our disposal I defy anyone to make head or tail of that Hebrew text, in which every word must be twisted and turned and reduced to its Biblical prototype in order to yield some sense. What a marked difference between the first and the last few chapters, the "Laus Patrum," for this very portion had been preserved in Hebrew, and has been utilized in Old Hebrew poetical versions. The sense was not difficult to

understand; it is an historical episode narrated in a simple current style, not like the sentences and maxims of the preceding chapters, in which every verse stands by itself like old proverbs and Mashalim. There is no alternative; either the book is *the* original, or it is a translation. If original, how could doublettes so freely be admitted as is the case with this Hebrew text? Could such doubles be introduced into any book even of remotely canonical value? How admit *variae lectiones* not of a Massoretic character, but simply due to the fact that the scribe had culled them from another version of the book? It occurs only in late works where "Nusha aḥ arina," i.e. another version, is often annotated at the margin. This attitude of the scribe proves, if any further proof be required, that to him the text he was copying was merely a translation from another language, of which other versions more or less akin to it were in existence, which he therefore collated and consulted for the improvement of the text he was copying. This is merely one example out of many for a very common practice of a later age, but to say that the "original" has constantly been corrected from the Syriac by one scribe, that another copyist had done the same with an eye on the Greek, that a third one then mixed both up and, joining them, interpolated from the one and the other and produced the amalgam now found in the Hebrew fragments, does not speak well for Biblical scholarship. This difference of view in the question of origin does not, however, detract from the merit of this valuable book. It will contribute largely to the final solution of the problem.

M. G.

STUDENT'S PALI SERIES: (1) Pali Grammar, 1899 (3 rupees); (2) Pali Buddhism, 1900 (12 annas); (3) Pali First Lessons, 1902 (3 rupees). By the Rev. H. H. TILBE, Ph.D. (Rangoon: American Baptist Mission Press.)

These three little books ought to be very useful to anyone wishing to take up the study of Pali by himself. The Grammar is very simple. No references are given, and rare

and difficult forms are not considered. But the paradigms are sufficiently full for all ordinary purposes. In the "First Lessons" we find six Jātaka stories taken from Fausböll's "Ten Jātakas," with translation, grammatical explanation of each word (with references to the pages of the Grammar), notes on the idioms and meanings, and short sentences in English to be turned back into Pali. There are also notes on the metres of the verses. It is a pity that in these last notes the metres are explained according to the mediæval books on metre. The verses to be explained, being many centuries older than the systematised theory, do not, of course, follow the rules of that theory. The elaborate plan followed in the explanation of these very simple little stories seems also unnecessary for an adult student. But the author has had experience in teaching Pali to Burmese boys, and is probably better able than anyone in Europe could be to judge of what is expedient in such a case. At the end is a full *index verborum* to the six Jātakas selected.

In the "Pali Buddhism" an attempt has been made to summarise, in a few pages, the essential meaning of this system of religion as explained in the canonical books, and to give an account of its founder and of the Order of mendicants established by him to carry the system out. There have been numerous attempts of the same or of a similar kind. Major-General Strong's summary of the system is the shortest, and on the whole the most happy. The author of each attempt has different ideas of what is really of essential importance in the system; and also both of the order in which it should be arranged and of the proportional space to be allotted to each item. The present attempt seems to me to be very successful, so much so, indeed, that it is worth while making a few suggestions upon it.

In the preliminary sketch it is stated (pp. 6, 7) that the system of caste had been fully adopted in India when Buddhism arose, and that the priests easily took precedence in that system. Neither point seems to me quite accurately put. We find, in the canonical books, the system of caste

in the process of development, and it is quite clear that the supremacy of the priest is not yet acknowledged.

Again (on p. 7), it is stated that "life for the masses was then full of evils, hardships, and inequalities." It is, at least, very doubtful whether the canonical books bear out this opinion. I should have been inclined to take the opposite view. The economic conditions (of which a very careful summary, with full references, appeared in our last volume) seem rather to have been very favourable to the bulk of the people. No references are here given in support of the proposition on p. 7; and it would be difficult, I think, to find any.

We read on p. 19 that the present form of the Pali Pitakas dates back to Buddhaghosa, and that it is claimed he retranslated into Pali the Sinhalese translation made by Mahinda from an original Pali text unfortunately lost before Buddhaghosa's time. All this is true, of course, only of the commentaries on the text, not of the texts themselves.

The statement on p. 22, and again on p. 30, that belief in God is condemned by the condemnation of *sīlabbata*, is scarcely right. What is condemned is the reliance, for salvation, on mere morality (*sīla*), or on works or duty (*vrata*). Nothing is said, one way or the other, about belief in God. Dr. Tilbe is perhaps entitled to draw, by implication, a conclusion to the effect that belief in God is thereby condemned. But historically speaking the Christian idea of God was unknown in India in the sixth century B.C., and it would be more scholarly to give this condemnation as the author's, not as Gotama's, view. It cannot be correct to say that the Buddha condemned a view of which he had never heard.

So also on pp. 26, 32, and 33, the word 'sin' is used, in phrases purporting to give the view of the early Buddhists, in a sense that was unknown to them. The word used in the original is not even *pāpa*; it is *moha*, which means folly, stupidity.

On pp. 27, 37 *Taṇhā* is translated 'desire'; and the

impression is conveyed that the early Buddhists considered that all desire ought to be suppressed. Now the cultivation of right desires is as much a part of early Buddhist belief as is the suppression of wrong desires. The second stage in the Path is here given as 'right aims' (p. 30), and there is little difference between an aim and a desire. The full discussion of this point, which appeared in this Journal for 1898, pp. 53–59, has apparently escaped the author's notice.

We trust that, before issuing another edition, the talented author will consider these points.

T. W. Rhys Davids.

Die religiösen und philosophischen Grundanschauungen der Inder, von Julius Happel. 8vo; pp. 252. (Giessen: Töpelmann, 1902.)

The object of this work is to consider the religion and philosophy of the Indians with the view, as stated in the preface, of bringing out "the supernatural character and the victorious power of Christianity." It is a prize essay written in response to an invitation issued by a Congress of the Lutheran Mission in Saxony. It is not difficult to see why it won the prize. The author had already, in 1877, won the prize in a former competition of the same sort. We see the practised hand in the arrangement of his materials; and may note the ability with which he fastens on the weak points in brahmin speculation, or on such forms of Hindu worship as can be made to look repulsive to modern readers in the West. He brings a wide erudition to bear on his task, and has read very widely in those Indian books that were composed or written by brahmins. It is even, perhaps, possible that this may be an objection to the success of his book. It is written primarily for the use of missionaries. And it is learned and treats of Hindu beliefs in so much detail that it may scarcely appeal to that class. On the other hand, the bias of the book is so strong that it will certainly not appeal to scholars who look at these

matters from the historical standpoint; and who know that Indian belief is even a much larger question than the one here discussed. The author looks too exclusively at the philosophical aspect of the question, and mixes together beliefs that were held at very different periods in Indian history.

NOTES OF THE QUARTER.

(October, November, December, 1902.)

I. General Meetings of the Royal Asiatic Society.

October 14th, 1902.—Sir Charles Lyall, Vice-President, in the Chair.

It was announced that—

The Maharaja of Bobbili, K.C.S.I.,
The Raja Pertab Bahadur Singh,
Mr. David Sassoon,
Mr. James Austen Bourdillon,
Mr. Douglas Ainslie,
Mrs. John C. Wrenshall,
Mr. Edward S. M. Perowne,
Mr. Dattatraya B. Parasius,
Professor G. Hagopian,
Mr. Herbert C. Fanshawe, C.S.I.,
Miss Winifred Gray,
Mr. Walter M. Aders,
Mr. Ferrar Fenton,
Mr. F. G. Hilton Price,
Count Landberg,
Mr. M. H. Phelps, and
Mr. Lala Benarasi Dass

had been elected members of the Society.

Professor Rhys Davids read a paper on "Materials for Indian History." A discussion followed, in which Dr. Hoey, Mr. J. D. Rees, Dr. Grierson, Mr. Beveridge, Professor Bendall, and Syed Ali Bilgrami took part.

November 11*th*, 1902.—Lord Reay, President, in the Chair.

It was announced that—

Prince Boris Chakhovsky,
Count Henry Coudenhove,
Mr. Lionel H. Proud,
Mr. Halil Halid, and
Mr. Lal Romesh Singh

had been elected members of the Society.

On behalf of Colonel DEANE, Dr. M. A. STEIN presented photographs and squeezes of inscriptions, with three inscribed stones, from the territory of Upper Swat.

Dr. Stein said: I am glad to lay before the Society some inscribed stones from the Swat Kohistan, which the Honourable the Chief Commissioner of the North-West Frontier Province, Colonel H. A. DEANE, C.S.I., has been kind enough to entrust to me for presentation to the Royal Asiatic Society.

Those members of the Society who give their attention to matters of Indian antiquarian research, need not be told of the many important services which Colonel Deane, during his long connection with the frontier regions across the Indus, has rendered to the cause of Indian archæology and epigraphy. His present gift is only the latest addition to the long list of interesting epigraphical records which have been brought to light through his exertions, both on our side of the border and beyond, and which, ranging from Edicts of Asoka down to inscriptions of the Moghul period, have helped to clear up more than one important aspect of the history of that fascinating territory. The present contribution is the first made by Colonel Deane since his own eminent services as a soldier-administrator have raised him to the position of first Chief Commissioner of the newly created Frontier Province. I consider it, therefore, a special privilege that I am able personally to offer to the Society this tangible proof of the fact that Colonel Deane, even when burdened with all the cares and responsibilities of a true 'Lord of the Marches' for India, has not ceased

to continue his efforts in the interest of archæological research.

The three inscribed stones and the cloth impression of a fourth now presented, closely attach themselves by their origin and characters to a series of inscriptions which had previously been obtained by Colonel Deane from various parts of ancient Udyāna, and which have been published by me in the Journal of the Bengal Asiatic Society for 1898 and in the J.R.A.S. of the year following. These inscriptions showed a great variety of unknown characters, among which, however, it was possible roughly to distinguish five types corresponding more or less to the territorial distribution of the reported find-places. The comparatively few inscriptions in the former collections which were described as coming from different parts of the mountain territory drained by the Swat River clearly represented a separate type, and with them the present acquisitions of Colonel Deane must undoubtedly be classed. With the exception of the small inscribed stone seal which is described in general terms as coming from 'Upper Swat,' the new inscriptions are stated by Mian Muhammad Kaka Khel, the person who brought them, to have been found at Dalai and Damoara, two villages of the Kāna Ilāqa, a small tract in the mountains which separate the Upper Swat Valley from the Indus.

The writing of these inscriptions shows a close affinity with that appearing on the stones from various parts of Swat which were published by me as No. 54 in the J.A.S.B., 1898 (pl. vii), and Nos. vii–ix in the J.R.A.S., 1899. It is particularly noteworthy that though we are quite in the dark as to the direction in which these unknown characters are to be read, or even as to what is intended as the top or the bottom of a particular inscription, a considerable number of characters in the newly acquired inscriptions can be recognized without hesitation as occurring also on the stones obtained years previously. Though the arrangement of the lines in the recently acquired inscriptions is on the whole to be made out more clearly, it has been impossible for me to ascertain the recurrence of any definite group of characters

or to find any other indication that might be expected to furnish a clue to the significance of particular characters or the general type of the writing. The latter remains, therefore, as puzzling as ever.

The hope of a safe decipherment for this as well as the other types of inscriptions 'in unknown characters' from that region appears to me to be still a distant one, and to depend mainly on the chance of the discovery of a bilingual stone showing also some known script. But the assumption which was first put forth by Professor Sylvain Lévi and myself, and which would connect these puzzling documents with the Turki domination of those tracts in the centuries preceding the Muhammadan invasion, is gaining more and more ground among fellow-scholars.

I may be allowed to quote the following extracts from the letter which Colonel Deane addressed to me in connection with the above inscriptions:—"It is certain that Mahmud Ghaznavi visited the Swat Valley. We know that his object in going there was to convert the Swatis to Islam. He did this. Later the Yusufzais invaded Swat; the Swatis were driven out of the valley, some into the hills where they are the Kohistanis of the present day. But a large body, as you know, came to the Hazara District and now occupy considerable tracts, both within and beyond our border, from which they ousted a Turki tribe. This Turki tribe is still represented in these parts. I am not at all sure we should not find that the family of the present Nawab of Amb was Turki. Was not Mahmud himself Turki, and did he not bring down with him in his invasion of India a considerable number of Turkis? Is it impossible that clans of these settled in these parts and on the present Yusufzai border now occupied by Khudukhels and others? And is it impossible that the Gaduns are Turki in origin? They are not a true Yusufzai tribe, though they are now as Pathan as any Yusufzais . . . .

"I noticed that Mr. Rapson, in one of his notes in the Royal Asiatic Society's Journal, in connection, I think, with your discovery of forgeries in Khotan, hinted that

forgery would account for some of these inscriptions in unknown tongues. The present ones have come to me with old coins and old arrow-heads about which there is no doubt, and my object in sending the former specimens to the Royal Asiatic Society was that they might be subjected to the closest examination. Those now sent may be subjected to the same. The conclusion I have come to is that there are genuine records of languages in these parts about which we know little or nothing; and because we know nothing of them is no reason to my mind for hinting at, or assuming, those records to be forgeries. I think that the translator [Dr. Huth] has hit on the right line, and that he has dealt with Turki records of a Turki tribe who were either established in these parts under the old rule in Kabul and had become Muhammadan, or who came about the time of Mahmud of Ghazni and brought Islam with them as well as their old language. I leave it to others to say which was the more probable.

"It is curious to find the Swatis in the Hazara District describing themselves as 'Pakhtuns'; and the Gaduns do the same, though the only theory that they are perhaps connected with the Kakar Pathans is in my opinion rubbish. They are not Pathans at all in origin."

As to the suggestion of forgery to which reference has been made above by Colonel Deane, I owe it to my friend Mr. Rapson to explain how thoroughly he understands the difference between the problems presented by these inscriptions and the imposture practised by that remarkable forger of 'ancient books' at Khotan, Islām Ākhūn, whom I had the privilege to unmask towards the conclusion of my Turkestan explorations. There is no real similarity between the conditions under which the inscriptions from Udyāna were secured at varying opportunities and through varying channels, and the system of quasi-competitive purchase by British and Russian officials working from a distant base, which accounts for the rapid development and equally short-lived success of Islām Ākhūn's frauds.

It was possible only by prolonged investigations on the spot to obtain that definite evidence which enabled me to establish the fact of those frauds, and which now makes it easy to distinguish between his forgeries and genuine ancient documents. I wish I could hope before long for a chance to carry out myself such local investigations on the ground of Udyāna as I had the good fortune to effect about ancient Khotan. But I fear, except for unforeseen changes in trans-frontier politics, the valleys through which our Chinese guides, Hiuen Tsiang and Fa-hien, had freely wandered in ancient days, may yet for a long time remain forbidden ground to the European student who would like to trace there the sacred sites which those pilgrims visited.

I may add, in conclusion, that Colonel Deane has been good enough to place at my disposal a collection of photographs showing most of the inscribed stones and impressions collected by him since 1894, and now deposited in the Lahore Museum. With Colonel Deane's concurrence I have handed over these photographs to the Royal Asiatic Society, in whose Library they will be available for reference to any student interested in these epigraphic remains.

The thanks of the Society were unanimously accorded to Colonel Deane for his interesting gift.

As the following note by Mr. Rapson has reference to inscriptions sent from the same part of the world, it is printed here, although it was sent to us subsequent to the meeting.

As both Colonel Deane and Dr. Stein have referred to my doubts as to the genuineness of some of the 'inscriptions in unknown characters' from the North-West Frontier of India,[1] I shall be grateful for an opportunity of explaining my reason for these doubts.

But before doing so, I may say again, as I have said before, that there would seem to be no reason whatever for

[1] J.R.A.S., 1901, p. 293.

doubting the genuineness of many of these inscriptions. In my review of Dr. Huth's "Neun Mahaban Inschriften,"[1] for instance, I expressly stated that, although I could not think that the correctness of his interpretation was beyond doubt, the inscriptions themselves presented every appearance of genuineness. No one holds more strongly than I do the view which Colonel Deane expresses when he says, "because we know nothing of them is no reason for hinting at, or assuming, these records to be forgeries." If one's doubts are not reasonable, they had better be kept to oneself For those which I publicly expressed in this Journal, I considered, and still consider, that I had very good reasons. The nature of these reasons I shall be very happy to explain.

As my remarks must not be lengthy, I will confine them to one set of inscriptions which can be easily referred to by all readers of the Journal—the "Impressions of Inscriptions received from Captain A. H. McMahon," published by myself, on behalf of Dr. Stein, in the April number for 1901, p. 291; and I shall deal chiefly with that particular instance in which the question of true or false appears to me to be no mere matter of opinion, but one capable of absolute proof.

As to the genuineness of the inscriptions in Nāgarī characters (Figs. 5 and 6 of the Plate), there is, of course, no question whatever; but with regard to the others (Figs. 1, 2, 3*a*, 3*b*, and 4) there seems to me to be the very greatest doubt. The first of these, the longest of all the published 'inscriptions in unknown characters,' seems especially to be proclaimed a forgery by every test that can be applied. The feeble scratchy character of the writing is in utter contrast to the bold, firm, deeply-cut letters usually found in the ancient inscriptions from this part of the world. The extraordinary variety of the letters, moreover, contrasting so strikingly with the limited number of characters found in the Mahaban inscriptions, makes it difficult to believe that it is in a language belonging to the same part of the world, or, indeed, in any language whatever. But both of these

[1] J.R.A.S., 1902, p. 209.

arguments may well be regarded as inconclusive. There remains, however, one piece of evidence from which there is no escape. The impression is stated to have been taken "from a large stone at Kanai in the Ilahi Ilaqua, on the right bank of the Indus." The impression itself shows that this statement is false. It was made, as a matter of fact, from a wooden plank on which these 'unknown characters' had been scratched. An examination of the photograph will at once show that there can be no possible doubt about this. The grain of the wood is distinctly traceable throughout the impression.

There can be no doubt that we have here, at all events, a *certain* case of an 'inscription in unknown characters' which has been deliberately manufactured. The forger has found it more convenient to make the inscription for himself on a deal board at home than to roam abroad in search of it.

Mr. Beveridge read a paper on "Donna Juliana." She was a Portuguese lady who had great influence at the Mogul Court at the beginning of the eighteenth century. She had been the faithful servant of Bahadur Shah when he, as Prince Mūazzan, was imprisoned for several years by his father Aurangzib. After his release in 1693 she accompanied him to Cabul, and returned to India with him when, on his father's death in 1707, he marched there to contest the throne with his younger brother. He was victorious, and his success was attributed in part to Juliana's prayers. Bahadur Shah was grateful to Juliana for her fidelity and wisdom, and made her superintendent of his harem. She had great influence during his reign, and also in those of his successors. An office called the Juliana was created in her honour, and one of her duties was the keeping of the imperial crown. In Farrukhsizar's reign she was instrumental in procuring the medical attendance of William Hamilton, who cured the emperor, and so obtained trading privileges for his countrymen. She died in 1734, and was succeeded in her office first by her sister's daughter and afterwards by five grandnieces. Theresa, the daughter of

the last holder of the office, married Colonel Gentil, a French soldier of fortune, in 1772, and accompanied him to France along with her mother. Theresa died in 1778, but her mother lived until 1806 and died at Versailles. The chief authority for Juliana's story is Valentijn, who gives an account of her and a portrait in the fourth volume of his great work on the Dutch East Indies. There is also a notice of her by Colonel Gentil, and there is a Persian life of her by Gustine Brouet, of which two MSS. exist in this country, viz., one in the British Museum, and another in the Pote Collection in the library of King's College, Cambridge. This life was translated into French by Professor E. H. Palmer, and is published in Malte-Brune's "Nouvelles Annales des Voyages."

December 9th, 1902.—Sir Charles Lyall, Vice-President, in the Chair.

It was announced that—

Major-General Alexander Thomson Reid and
Mr. K. Sankara Menon

had been elected members of the Society.

Professor E. G. Browne announced the completion of the Gibb Memorial Fund (see p. 250).

The Rev. W. Shaw Caldecott read a paper on the Babylonian Measures appearing on the Scale of Gudea. A discussion followed, in which Mr. Pinches, Mr. Boscawen, Professor Rhys Davids, and Mr. Hagopian took part. The paper will appear in the April Journal.

II. Contents of Foreign Oriental Journals.

I. Zeitschrift der Deutschen Morgenländischen Gesellschaft. Band LVI, Heft 3.

Rothstein (J. W.). Zur Kritik des Deboraliedes und die ursprüngliche rhythmische Form derselben.

Konow (Sten). Zur Kenntniss der Kuki-Chinsprachen.

Mills (L. H.). Pahlavi Yasna XI, XII, XIII, with all the MSS. collated.

Schwarz (P.). Zu den Tables alphabétiques du Kitāb al Agānī II.

Praetorius (F.). Über den sogen Infinitiv absolutus des Hebraïschen.

Caland (W.). Zur Exegese und Kritik der rituellen Sūtras.

Nestle (E.). Zur syrischen Übersetzung der Kirchen geschichte des Eusebius.

Jolly (J.). Zur Quellenkunde der indischen Medizin.

Fischer (A.). Usaicid-Usaicidī-Usaidī.

Jacobi (H.). Ānandavardhana's Dhvanyāloka.

Brockelmann (C.). Ein syrischen Text in armenischen Umschrift.

Oldenberg (H.). Erwiderung.

II. Vienna Oriental Journal. Vol. XVI, No. 3.

Littmann (E.). Tigriña Texte im Dialekte von Tanbên.

Negelein (Julius von). Eine epische Idee im Veda.

Krall (J.). Koptische Ostraka.

Hertel (J.). Die Erzählung vom blauen Schakel in den Hamburger Pançatantra HSS.

III. Obituary Notices.

Canon Rawlinson.

We regret to announce the death, which took place on the 6th October, 1902, at his residence in Cathedral Precincts, Canterbury, of Canon George Rawlinson, who would next month have attained his 90th birthday.

The death of George Rawlinson removes a venerable and interesting figure. Though not a man of genius, he was a scholar of ability. In his "Herodotus" he turned to good account the new discoveries in the East, in which his more brilliant elder brother, Sir Henry Rawlinson, took so

large a part, and thenceforward became the popular historian of the ancient Eastern world for English readers. His industry and extensive (if largely second-hand) learning won for his books, especially the "Herodotus" and "The Five Great Oriental Monarchies," a place in many English libraries.

George Rawlinson was born at Chadlington, in Oxfordshire, November 23, 1812. He was the third son of Abram Tysack Rawlinson, a noted breeder of racehorses. He played for Oxford in the first cricket match against Cambridge in 1836. From 1841 he was a tutor of his college, and took Holy Orders in 1842 and 1843. He vacated his tutorship in 1846 on his marriage with Louisa, daughter of Sir R. A. Chermside. From 1846 to 1847 he held a curacy at Merton, in Oxfordshire, but subsequently returned to Oxford, where he lived the life of a scholar, examining the schools and taking an active part in the movement for the expansion of the University.

His "Herodotus" appeared in 1858 (with a dedication to Mr. Gladstone), and marks an epoch in the study of that historian. It consisted of a translation (which became the standard one) with short notes and many essays on historical and racial questions connected with Herodotus, to which the contributions of Sir H. Rawlinson and Sir Gardner Wilkinson gave a special importance. The translation is still the only fully annotated edition of the whole author in English, and in its abridged form (2 volumes, 1897) is still probably the most used in Rawlinson's old University. It would require more extensive revision than it has ever received to bring it up to the level of the latest research, particularly on the side of Oriental history and antiquities, but the notes include much original information that will always be of value.

Thenceforward his literary activity was continuous, but he found time for much else. All sides of Oxford life interested him. He was a guardian of the poor (1860–63), an original member of the Oxford Political Economy Club and its first treasurer, and a perpetual Curator of the University Galleries.

He gave the Bampton Lectures in 1859 (the year after Mansel), and in 1861 succeeded Dr. Cardwell as Camden Professor of Ancient History. He held the Chair till 1889, but his professional lectures were not largely attended, and as professor he found many opportunities for writing. From 1862 to 1871 appeared the successive volumes of "The Five Great Monarchies of the Eastern World," followed by volumes on the sixth great monarchy in 1873, and on the seventh in 1876. New editions of this work and of the "Herodotus" have come out from time to time, and he dealt with the same and kindred subjects in more compendious forms—"A Manual of Ancient History" in 1869, "A History of Ancient Egypt" in 1881, a "History of Phœnicia" in 1889, and a "History of Parthia" in 1893. He also contributed to the "Speaker's Commentary," Dean Spence's "Homiletic Commentary," Smith's "Dictionary of the Bible," and wrote a number of present-day tracts. Besides the "Bampton Lectures" and a volume of sermons preached before the University (1861) on "The Contrast of Christianity with Heathen and Jewish Systems," he published many miscellaneous articles, biographical and historical.

Canon Rawlinson belonged to a class of scholars, happily not rare in England, who, without possessing the highest gifts, by good sense and industry and a happy use of opportunity, do much to promote the cause of education and to popularize the results of learning.

(From the *Times*.)

IV. Notes and News.

Trinity College, Dublin, is taking serious steps towards forming an Indian school for selected candidates. Mr. Charles Kough, I.C.S. retired, has been appointed lecturer on Tamil and Telugu; and Mr. Vincent A. Smith, I.C.S. retired, has been appointed lecturer on Indian History and Hindustani.

Medal Fund: Madras Contribution.

Towards the close of 1900, mainly through the instrumentality of Mr. H. A. Sim, C.I.E., of the Madras Civil Service, a sum of £1225 was subscribed by the following Chiefs and Native noblemen in Southern India:—

	£
H.H. the Rajah of Cochin, K.C.S.I. ...	300
The Maharajah Gajapatti Rao, C.I.E. ...	300
The Rajah of Parlakimedi	300
The Maharajah of Jeypur	100
The Maharajah of Bobbili, K.C.I.E. ...	50
The Rajah of Kallikote and Alagada ...	50
H.H. the Maharajah of Travancore, G.C.S.I.	25
Rajah Sir S. Ramasami Mudeliar, Knt., C.I.E.	25
The Rajah of Venkatagiri, K.C.I.E. ...	25
Rajah Venugopala Bahadur	25
Hadji Badsha Sahib	25

The money was given with the general idea of helping the Royal Asiatic Society to found a Jubilee Gold Medal for the encouragement of Oriental learning, on the understanding that should there be more than was required for that particular purpose the donation should be devoted to some other equally desirable object of the same nature.

After the most careful consideration it was determined to leave the Jubilee Medal to be given triennally as originally proposed, and as the money for that purpose was forthcoming, to devote the further subscription to two purposes;

(1) The publication from time to time of some work considered deserving of recognition as an *œuvre couronnée*.

(2) The grant of Prizes of Books (designated the "Royal Asiatic Society's Public School Prize") to such of the more prominent Public Schools in this country as are in a position to afford teaching in Indian History and Geography, for an Essay on some Indian or other Oriental subject chosen by

the Council of the Royal Asiatic Society, the best of such Essays receiving a Gold Medal to be called the "Royal Asiatic Society's Indian Empire School Medal."

At present the funds at the disposal of the Society only admit of this scheme being applied to seven schools, viz., Eton, Harrow, Rugby, Winchester, Charterhouse, Westminster, and Merchant Taylors, but should, as is hoped and expected, further subscriptions be received, the number will be gradually increased, so that the scheme may possibly eventually become of national importance.

ROYAL ASIATIC SOCIETY,
22, ALBEMARLE STREET.
December, 1902.

GIBB MEMORIAL.

We have much pleasure in announcing that a fund has been established in memory of our late distinguished member, the well-known Turkish scholar, Mr. E. J. W. Gibb. The clauses of the Trust Deed under which the fund will be administered are a model of what such clauses ought always to be. Clause 3 especially, dealing with the objects to which the interest of the fund may be applied, is so well deserving the notice of our readers that it is here set out in full:—

3. The trustees shall apply the income of the "E. J. W. Gibb Memorial" to or for all or any of the objects or purposes following (but during the life of the said Jane Gibb with her approval in writing) that is to say—

(A) The search for or procuring by purchase or otherwise of books or manuscripts ancient or modern in any of the following languages that is to say: Turkish (as well its Eastern as Western dialects) Arabic and Persian in their various forms and dialects both ancient and modern.

(B) The translation and editing with or without notes of all or any such books and manuscripts or of any books dealing in any way with the language literature or history of the Turks (Eastern or Western) the Arabs or the Persians.

(C) The printing or reproduction in facsimile or otherwise and publishing of any such books manuscripts or translations or of any books dealing in any way with any such language literature or history as aforesaid but so that the title page of every publication shall contain a statement that it is "published by the trustees of the E. J. W. Gibb Memorial."

(D) The dissemination and distribution by gift sale or otherwise of books or other literature bearing upon any such language literature or history as aforesaid.

(E) The making of money grants to students by way of travelling scholarships or otherwise for the purpose of some work of investigation connected with any such language literature or history as aforesaid which in the opinion of the trustees shall be likely to advance the studies aforesaid and so that every student who shall receive in any year a grant of or exceeding the sum of £50 shall be called a "Gibb scholar."

(F) The appointment and payment of lecturers on the study of the Turkish language literature or history and so that every lecturer be called a "Gibb lecturer."

(G) The contribution of money in or towards all or any of the objects or purposes aforesaid whether being affected or carried out by any other person persons body of persons or institution alone or jointly with the trustees; and

(H) Any other object or purpose the effecting or carrying out of which may in the opinion of the trustees promote or advance the study of the language literature or history of the Turks (Eastern or Western) the Arabs or the Persians but not in any case by monumental or other inscriptions.

The income of the Fund, which amounts to about £6,000 and has been provided by the generosity of Mrs. Jane Gibb, will be rather more than £200 a year. Its administration has been entrusted to Professor E. G. Browne of Cambridge, Mr. Guy Le Strange, Mr. H. F. Amedroz, Mr. A. G. Ellis, Mr. R. A. Nicholson, and Principal Denison Ross, all of them members of this Society, as the first trustees, with power to fill up vacancies in their body.

It would have been impossible to devise a plan more certain to keep alive the memory of the able and earnest scholar whose name it bears. The selection of the first trustees is admirable, and the scheme may be expected to yield important results to Oriental scholarship.

V. Additions to the Library.

Presented by the India Office.

Catalogue of the Library. Vol. ii, pt. 3.
8vo. *London*, 1902.

Foster (W.). The Founding of Fort St. George, Madras.
8vo. *London*, 1902.

Fauna of British India.
Pocock (R. I.). Arachnida. 8vo. *London*, 1902.
Distant (W. L.). Rhynchota. Vol. i.
8vo. *London*, 1900.

Presented by the Royal Geographical Society.

Das (Sarat Chandra). Journey to Lhasa and Central Tibet, edited by the Hon. W. W. Rockhill.
8vo. *London*, 1902.

Presented by the Deutschen Morgenländischen Gesellschaft.

Liebich (B.) Cāndra Vyākaraṇa, die Grammatik des Candragomin. 8vo. *Leipzig*, 1902.

Presented by the Director of the Mysore Archæological Series.

Epigraphia Carnatica. Vol. v, pts. 1, 2: Inscriptions in the Hassan District. By B. L. Rice.
4to. *Mangalore*, 1902.

Presented by the Society for the Promotion of Researches into the Zoroastrian Religion.

Report on the Society's Proceedings, 1890–1—1897–8.
8vo. *Bombay*, 1902.

Presented by the Delegates of the Clarendon Press.

Butler (Dr. A. J.). The Arab Conquest of Egypt and the Last Thirty Years of the Roman Dominion.
8vo. *Oxford*, 1902.

Presented by F. D. Mocatta, Esq.

Jewish Encyclopædia. Vol. i.
8vo. *New York* and *London*, 1901.

Presented by Professor Rhys Davids.

Huth (G.). Die Tungusische Volkslitteratur und ihre Ethnologische Ausbeute. 4to. *St. Petersburg*, 1901.

Presented by the Société Finno-Ougrienne.

Ramstedt (G. J.). Über die Konjugation des Khalka-Mongolischen. 8vo. *Helsingfors*, 1902.
——— Das Schriftmongolische und die Urgamundart.
8vo. *Helsingfors*, 1902.

Presented by the Author.

Booth (A. J.). The Discovery and Decipherment of the Trilingual Cuneiform Inscriptions.
8vo. *London*, 1902.

Jacob (Colonel G. A.). A second Handful of Popular Maxims current in Sanskrit Literature.
8vo. *Bombay*, 1902.

Landborg (Count C.). Die Mehri-sprache in Südarabien von Dr. A. Jahn und die Mehri- und Soqotri-sprache von D. H. Müller kritisch beleuchtet. Heft i: Die arabischen Texte. 8vo. *Leipzig*, 1902.

Dass (L. Benarasi). A Lecture on Jainism delivered at Muttra. (Jain Itohas Series, No. 1.)
8vo. *Agra*, 1902.

Fenton (Ferrar). The Bible in Modern English. Vols. i–iii.
8vo. *London*.

Thackeray (Colonel Sir E. T.). Biographical Notices of Officers of the Royal (Bengal) Engineers.
8vo. *London*, 1900.

Beatson (Surgeon-General W. B.). Indian Medical Service: Past and Present. 8vo. *London*, 1902.

Brandstetter (Dr. R.). Tagalen und Madagassen. 8vo. *Luzern*, 1902.

Suter (H.). Nachträge und Berichtigungen zu die "Mathematiker und Astronomen der Araber und ihre Werke." 8vo. *Leipzig*, 1902.

Gronbeck (V.). Fortstudier til Tyrkisk Lydhistorre. 8vo. *Copenhagen*, 1902.

Barth (A.). Jainisme-Hindouisme. Pamphlet. 8vo. *Paris*, 1902.

Kishori (Lal Sarkar). The Hindu System of Religious Science and Art. Post 8vo. *Calcutta*, 1898.

——— The Hindu System of Moral Science. 2nd ed. Post 8vo. *Calcutta*, 1898.

——— The Hindu System of Self-Culture, or the Patanjala Yoga Shastra. Post 8vo. *Calcutta*, 1902.

Carra de Vaux (Le Baron). Gazali. 8vo. *Paris*, 1902.

Bezold (Dr. C.). Ninive und Babylon. 8vo. *Leipzig*, 1902.

Presented by the Publishers.

Hillebrandt (A.). Vedische Mythologie. Bd. iii. 8vo. *Breslau*, 1902.

Neumann (K. E.). Die Reden Gotamo Buddho's. Bd. iii, Lief. 5. 8vo. *Leipzig*, 1902.

Franke (R. O.). Pali und Sanskrit. 8vo. *Strassburg*, 1902.

——— Geschichte und Kritik der einheimischen Pali Grammatik und Lexicographie. 8vo. *Strassburg*, 1902.

Browne (Professor E. G.). A Literary History of Persia. Roy. 8vo. *London*, 1902.

Ahlwardt (W.). Sammlungen alter Arabischer Dichter: I. Elaçma'ijāt nebst einigen Sprachqaçīden. 8vo. *Berlin*, 1902.

Brooks (E. W.). The Sixth Book of the Select Letters of Severus, Patriarch of Antioch, in the Syriac Version of Athanasius of Nisibis, edited and translated. Vol. i (Text), pt. 1. 8vo. *London*, 1902.

Bullock (T. L.). Progressive Exercises in the Chinese Written Language. 8vo. *London*, 1902.

Purchased.

Wilson (A.). The Abode of Snow. 8vo. *Edinburgh*, 1875.

Shand (A. T.). General John Jacob. 8vo. *London*, 1900.

Knight (E. F.). Where Three Empires Meet. 8vo. *London*, 1893.

Rawlinson (Rev. Canon G.). Memoir of Major-General Sir H. C. Rawlinson. 8vo. *London*, 1898.

Sen (Keshub Chunder). Lectures in India. 8vo. *London*, 1901.

McMahon (Major-General R.). Far Cathay and Farther India. 8vo. *London*, 1893.

Shaw (R.). Visits to High Tartary, Yārkand, and Kashgar. 8vo. *London*, 1871.

Suau (Père Pierre). L'Inde Tamoule. Roy. 8vo. *Paris*.

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ART. VIII.—*The Linear Measures of Babylonia about* B.C. 2500.

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(*To accompany Diagrams of the Senkereh Tablet and copy of the Scale of Gudea.*)

PART I: ON THE RECONSTRUCTION OF THE SENKEREH TABLET.

1.

IT is deeply interesting to know how men's minds worked when the world was young. And it is to Babylonia—the cradle of the human race—that we must go for some evidence of this. The low alluvial plains at the head of the Persian Gulf are covered with the remains of primitive cities, palaces, temples, and cemeteries; from one of which, fifty years ago, was disinterred the little slab of unbaked clay which is now to engage our attention, as embodying the world's earliest known arithmetical system.

Senkereh is a small Arab village standing on the site of the ancient city of Larsam or Larsa, in Southern Babylonia. Not far away from its series of mounds are the ruins of Warka—the Erech of Genesis x, 10—and of Mukayyar, once the home of the Patriarch Abram. Here, in 1850, Mr. W. K. Loftus discovered a great number of tombs containing baked-clay tablets and pottery, the former with rude Cuneiform inscriptions impressed upon one or both

sides. His most valuable discovery was a 'table of squares,' which, with the late Sir Henry Rawlinson's aid, was seen to confirm the statement of Berosus the Chaldean, that the Babylonians made use of a sexagesimal notation, the unit of which was termed a *sossus*, as well as of a decimal notation.

The early investigations into the contents of this tablet were confined to its reverse side, which is in a state of almost perfect preservation, and which, from its geometrical method, is of comparatively easy comprehension. Its other side, the obverse, is in much worse condition, nearly one-half of its figures and ideographs being flaked away.

Under Sir Henry Rawlinson's editorship the Trustees of the British Museum published a transcription of the tablet in the fourth volume of their invaluable "Cuneiform Inscriptions of Western Asia," the second edition of which appeared in 1891.[1] The possible value of this tablet was early recognized. In 1868 Lenormant issued his "Essai sur un Document Mathematique," and in 1877 Professor Lepsius, of Berlin, published a monograph upon it, which may be seen in the library of the Society of Biblical Archæologists. Beside these, many other attempts were made to restore the missing figures, and to read the riddle of this literary sphinx. Hommel well expressed the general conviction of Assyriologists when he wrote (Hastings' "Dictionary of the Bible," 1898, Article *Babylonia*), "On the reverse of the tablet of Senkereh are given the squares and cubes of the cubit from the No. 1 up to 60 [this is a clerical error for 40], and on the obverse the fractions and multiples of the cubit." This much was perceived, but no more. Its reconstruction still remained for others to accomplish. The result to be attained seemed so exceedingly desirable that several months of intense application have enabled me to present to-day an exposition of the obverse side of the tablet, which, though not complete to the smallest detail, still is so far consistent and harmonious with the existing impressions of the stylus as, I believe, to merit general acceptance.

[1] The tablet itself is numbered 92,698, and is in the British Museum.

When it is stated that each side of the tablet has a surface for writing of about six inches square, and that 285 separate characters are still distinguishable on the obverse, and that these require the addition of an almost equal number which have been effaced, in order to complete the system, it will be seen that enormous difficulties have already been overcome in its transcription. The difficulties must have been insuperable but for the use of the microscope, a magnifying-glass having been almost certainly used in its construction. Why a work of such care and elaboration should not have been hardened by being baked, is one of those questions which it is easy to ask and impossible to answer.

Coming now to the contents of the tablet, we find that our first duty is to divide it horizontally into sections and longitudinally into sub-columns. This involves, of course, some acquaintance with its contents and with the value of each of its characters. This done, we find that there are, in each of its four columns, six sub-columns, the number of sections in each being either three or four.

Column I (Diagram IV).[1]

The first column is found to represent a series of arithmetical progressions, and is not, as are the other three, a column of multiplication, with the multiplier unexpressed. In extent it ranges from the smallest length-measure, that of the line, to half of each of the ells contained in the following columns. The way in which this minutest fraction is expressed is a very ingenious one. Three sossi are taken, and are repeated through nine lines. This is done in sub-column 1, and their equivalents in writing are set down opposite to them in sub-column 6. Between these two rows of characters, and in sub-column 3, there are impressed the gradual and progressive values of nine *lines* (Section A), with the sign for addition connecting them with the written figures to their left. The third line on the fifth

[1] In an independent study of the Senkereh tablet it will be found advisable to take the diagrams in the order of their numeration, 1 to 4, rather than that of the columns.

diagram shows that, with the exception of the great ell, this is the only instance in which a written figure was taken to express a whole number or a fraction of a whole number; the idea to be conveyed being that three sossi were one-twentieth of a palm, a measure which could hardly have been distinguished in any other way than by having its own ideograph. This ideograph occurs only here in the tablet.

In this way six sossi are reached, and the first section is complete, it having been shown that there are three 'lines' to each sossus.

In Section B the progression is a decimal one, and the later figures move forward in *tenths* of a palm. In Section C the progression is a duodecimal one, and the figures move forward in *twelfths* of a palm. To each of these sections the value of half a palm is devoted, and the table has now arrived at its true summit and goal, which was to show the whole palm, as hand-breadth, with all its accompanying fractions, except its principal one, which was reserved for Column II, where it appears on lines 14–22.

Before closing the record, however, the scribe inserted another section, D, in order to show the relation which the palm bore to the subsequent columns. The palm of 60 sossi is therefore given as $1\frac{1}{2}$, 2, and $2\frac{1}{2}$ palms, thus leading us insensibly to its further developments, as now to be indicated.

Column II (Diagram III).

This is a column of multiplication, and is comparable to the second column in an ordinary multiplication-table. Apart from the fact of the multiplier 3 being unexpressed, and from the bad condition of the upper part of the Cuneiform, it presents few difficulties.

In one respect, indeed, it differs from those following, and this singularity merits a moment's consideration. It is this. Whereas the multiplicand in each of the Columns II, III, and IV is the same, namely, twelve palms variously arranged and expressed, in Column II the working-out of the system is divided into two main divisions. In the former of these

four palms are dealt with, in minute fractions, and are multiplied into small ells, each ell being of the length of three palms. In the latter, Section C, eight palms are dealt with in larger fractions, the total of both divisions being 12 palms each of 60 sossi $\times$ 3 = 2,160, a figure which is recorded at the foot of the column.

Columns III and IV (Diagrams II and I).

In these columns the unexpressed multipliers are 4 and 5 respectively, and with this key in his hand any scholar will be able to test for himself the correctness of the conclusions given and that of the restored figures. One item only of these columns needs to be referred to here. They, in common with Column II, are worked out to a higher denomination than ells. When a certain number of ells had been reached, the system developed into one of reeds, just as with us inches become feet and feet become yards. Unfortunately, the distinguishing mark of these reeds (i.e. that by which they were known one from another) has been effaced in all but one of the columns. The missing characters have been conjecturally restored in the left-hand panels of the diagrams, but these have no accepted authority, except in Column IV.

The Fractions of the Tablet.

One of the most fascinating aspects of the tablet is the way in which its fractions are expressed. Of these there are a great number, and they afford us a higher conception of the mathematical attainments of primitive man than can be got in any other way. The fractions used are these: $\frac{1}{4}$, $\frac{1}{3}$, $\frac{1}{2}$, $\frac{2}{4}$, $\frac{2}{3}$, $\frac{5}{6}$, and $\frac{7}{8}$. The improper fractions $\frac{3}{3}$, $\frac{4}{3}$, and $\frac{5}{3}$ are also used. For the mode of their expression I must refer to a later page, where it will be seen that a horizontal wedge, cut in half by an upright wedge, is the sign for $\frac{1}{2}$, and that this simple principle of the ocular demonstration of the fraction intended obtains throughout the whole series.

I may take leave to doubt whether, either the actual

finger-breadth or the finger-length is ever here referred to as a factor of the palm, which, it will hardly be denied, was the 'fundamental' of this whole system of length-measures. Taking the palm as the original from which all other measures were derived, the tablet shows that six lesser lengths were derived from it, and that it was multiplied into six greater lengths. Amongst these twelve derivations the finger does not appear. What does appear, and what for convenience has been termed a 'digit,' on nine lines of Column II, is one-third of a palm, each unit being of the value of twenty sossi. These I take to have been adopted as the conventional length of the fore-joint of the thumb, which is ordinarily about one-third of the width of the palm, and may have been commonly used in a sparse population (as was the hand-breadth) for purposes of measurement. Disputes arising from this unscientific method would early compel the conventionalization of both measures.

A tribute of respect is due to the dead-and-gone sages who, some five thousand years ago, worked out for themselves, and for us, this system of arithmetic. With only their right hand to guide them, they elaborated a system which in many respects is superior to that in use amongst ourselves. For theirs was at once decimal and duodecimal, and in their monetary system there could not have been the anomaly of having twelve pence in a shilling and twenty shillings in a pound without any power of simple co-ordination.

How closely they adhered to the human hand as the source and embodiment of their whole system may be seen in their appropriation of its five fingers to differing uses. *One* was the symbol of unity or completeness, and is used in twelve different relations on the face of the tablet, as shown in diagram No. V. *Two* was used for all purposes of duplication. Thus there were single reeds and double reeds of three varieties. The remaining integers, 3, 4, and 5, when multiplied together, gave them the 60 which Berosus chronicled, and which, being divisible either by 10 or 12, gave them in the sexagesimal system of notation a more simple and elastic system than our decimal one.

What I think may be considered as having been established by the present reading of the Senkereh tablet are these three points. That in the system which it represents—

(1) *The breadth of the hand-palm (conventionalized) was the fundamental of all length-measures.*

(2) *That there were three ell-lengths in simultaneous use, each probably in a different department of trade, like our own Troy and Avoirdupois weights.*

(3) *That the relation of these ells to one another was the relation of* 3, 4, *and* 5; *these having been the number of palms of which they respectively consisted.*

2.

Having thus given a bird's-eye view of the construction of the restored Senkereh tablet, and a brief summary of the conclusions to be drawn from it, it is now necessary to go over the field again with more especial reference to the arithmetical signs used, and to the characters, other than figures, which appear on its face.

The numerals themselves do not detain us, as, with one or two exceptions,[1] they are not more difficult of comprehension than are the later Roman figures, but the mode in which the fractions are expressed is not undisputed. To this, therefore, a brief space may be given.

In the system by which the various fractions of a whole number were at the first made visible to the eye, and given an abiding permanency, we have the solution of a deeply interesting problem. In order to attain these ends, the original method would seem to have been that of taking a single wedge, which was throughout the emblem of unity, and by treating it as such to convey to the mind, through the eye, the desired idea. This foundation wedge was generally treated horizontally, there being thus but one step

[1] Of these exceptions that for 19 is the most unusual. It does not occur on the obverse of the tablet. The distinction between 4 and 40 is thus attained: = 4, = 40.

from the work of the hewer-of-wood to that of the ideal of the artist in clay. So placed, the prostrate unit was 'cut up' into its various component parts, and thus the intended effect was produced. The earliest application of this principle naturally would be to divide a single wedge into its 'halves'; and to do this in such a way as that a person at a distance, seeing the *graph*, would know what was intended.

The series would then be as follows:—

(1) = ½.

This sign occurs in each of the four columns of the tablet, and has everywhere the same relative value, that value being one moiety of some whole number, generally that of the one preceding it; e.g., in Column II, line 24, the 'half' is that of the immediately preceding total of 720 sossi. In Column III, line 19, the 'half' is that of the medium ell of 240 sossi, to which the whole section is devoted. In Column IV, lines 24 and 29, it is one 'half' of the great reed of 1,800 sossi, to the growth of which the whole section is devoted. As, however, Assyriologists are in full accord as to the meaning of this sign, there is no need to say more about it.

(2) = '*third.*' = ⅓. = ⅔.

This character, when unassociated with any other, occurs but once on the face of the tablet. This is in Column II, line 22, where its undisputed appearance furnishes indubitable evidence and plays a most important part in the elucidation of the column. For we have here the singular result that while the whole column is based upon a multiplicand of 12 palms (as are the others), and works out by multiplication to a total of reeds (as do the other columns), yet we have in this single character a suggestion of another division of its contents (other than the usual) into two parts of one and two reeds. The presence of this sign shows that its first division

consisted of but one-third of the whole. Had this single figure been effaced by time, I do not see how the tablet could have been perfectly reconstructed.

In all other parts of the tablet the is accompanied by one or more index figures following it, to show how many 'thirds' were intended. This is indicated by a number of perpendicular wedges, which tell us whether *one* or *two* thirds are to be taken into account.

In Column III, lines 26–30, this system is still further extended, so as to reach the improper fraction of five-thirds, these being the fractions, in ells, of which the medium reed consisted before it reached the second unit. Four of these five characters are in the original, one only requiring to be added by conjecture.

(3) = $\frac{3}{4}$.

This sign occurs but once on the face of the tablet as the equivalent of three-quarters of a whole number. It is found in Column II, line 25, as one of a series of progressive fractions, and being in such good company its respectability can hardly be doubted. Its normal construction is also in its favour, as it is that of a horizontal wedge divided into quarters, three of which are indicated by as many upright wedges, the middle wedge being taken to be in the centre of the prostrate one.

Allied to this character, both in form and significance, are two others. One of these occurs repeatedly in Column III, where in lines 12–16 (preceded by two conjectures) it stands as the sign for the 3-palm ell.

In the summary line of Column II, sub-column 1, line 33, is another instance of the use of a character similar in appearance to that under consideration. It is here taken to signify 'three,' that being the unusual number of reeds into which the whole multiplicand sub-column above it had been multiplied.

It is not certain that these three characters, so similar in meaning to one another, are exactly identical in shape. The

three upright wedges in each of them may have been slightly differentiated in position, so as to give a distinctive character to each. In the case of the five occurrences on Column III, it may have been intended to convey that the small ell there was three-quarters the length of the ordinary or medium ell, just as the old English ell of 27 inches was three-quarters of a yard. This would then be its name, and no difference of structure would be required, the same sign serving for three-quarters of an integer and the three-quarter ell.

(4) $(x) = \frac{1}{4}$ (?).

The original sign for one-fourth does not now, unhappily, occur in any part of the tablet as an independent character. Its place in Column II, sub-column 6, line 23, where the 'system' of the tablet makes it imperative, has been irremediably injured and the writing defaced.

On the principle of analogy and by acting on the rule already suggested as that by which the expression of all the fractions was arrived at, we may give to it the character of a horizontal wedge of which the fourth part is indicated by a wedge standing above it. Its place should be to the right of the centre. While, however, no instance of such figure is to be found, there are slight indications that the sign for one-quarter, when used in combination with other fractions, was a single perpendicular wedge. This will be seen in the next paragraph.

(5) $= \frac{5}{6}$.

This sign actually occurs only in Column IV, lines 26 and 31, and conjecturally in Column II, line 31. These occasions enable us to determine its value with something like certainty, and to analyze its form in harmony with the examples and principles already laid down. Its composition would seem to have been determined by a union of two other fractions, thus :—

$= \frac{1}{3}$.

$= \frac{1}{4}$.

$= \frac{1}{4}$.

These being added together will give the fraction of five-sixths.

(6) = $\frac{7}{8}$.

In close conjunction with the sign for three-quarters will be found that for seven-eighths, which seems to have been founded upon it. Of the one-quarter which remained when three had been cut off, to make the former, it was but necessary to halve the remainder to give the desired result of seven-eighths. This was accordingly done, but the additional wedge, instead of being placed *beside* the other, was written *above* it, thus signifying that of the original whole number, but one-eighth was excluded instead of one-quarter. It appears in Column II, line 26.

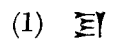
In closing this part of the subject I may say that I am quite aware that to some of the above-mentioned characters other meanings are given by Cuneiform scholars. I do not dispute the correctness of their interpretation. As, however, most characters of this early language have more than one meaning, and in some cases a great variety of meanings, I would urge that to those already accepted the values here given to these signs may be added. I do this upon the ground of the homogeneity of the whole document before us, which requires that in it these values, and these only, be read into the six signs which have already engaged our attention.

3.

We pass now, by a natural transition, to the consideration of the remaining characters of the tablet, i.e. those other than figures or arithmetical signs. These will merit the most cautious and enlightened treatment, as it is upon their evidence that the whole metrological value of the tablet rests. As with ourselves a series of ledger accounts are dependent for the just appreciation of their figures upon the headings of their columns for pounds, shillings, and pence, so here. The six characters now to engage our attention correspond,

in their uses, with the £ *s. d.* of commerce; and any error of interpretation, or feature that may be overlooked, will vitiate the whole scheme and render it worthless.

In order to distinguish these six determinatives-of-values from the 'signs' already dealt with, they are here named *ideographs*, though this term is not perhaps philologically correct. They are taken in the order of their supposed length-values, rising from the lesser to the greater.

(1)  = *the Sossus.*

The union of these two characters is approved by Mr. Theo. G. Pinches, LL.D., who writes: "These two characters cannot, when side by side, be separated, and in that case they stand for hand-horn, the meaning 'hand' and the meaning 'horn.'"

Avoiding all possible controversial matter as to how this combination came afterwards to be interpreted into its recognized and cognate meaning or meanings, I wish to confine myself to the sole evidence of the Senkereh tablet, from the first column of which we learn that the fundamental measure of Babylonian metrology was divided into sixty spaces. These, we may suppose, to have been marked by notches on a stick or rule, or by cuttings in a clay tablet. It is not improbable that these notches, or rather the spaces between them, were originally called 'horns,' and as the measure of the hand was the basis of the system, there is every reason for the application of the term 'hand-horn' to the length-measure which Berosus the Chaldean tells us was the original of the Babylonian system of metrology.

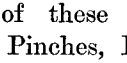
This compound ideograph  occurs no less than ten times in a perfect state on the tablet, at other times requiring to be read-in as part of the sub-columns in which varying numbers of sossi are given. This is noticeably the case in the first twelve lines of Column II, sub-columns 1 and 6. A still better example, all the figures being authentic, may be found in Column IV, sub-column 1, lines 1–17, with the denominator unexpressed. In this case the twelve in sub-column 3 are taken to belong to the figures on their right.

Diagram V shows that no single ideograph has so many occurrences on the tablet as that for the *sossus*. This is what should have been expected when its premier position is remembered. It ought to be no detriment to this aspect of the case that the ancient artist has sometimes forgotten to head his sub-columns with the yard or foot or inch of his day, or likelier still has failed to find room for it. The coherency of the whole tablet should be our sufficient warrant for understanding these governing signs when not expressed.

(2) = $\frac{1}{2^{10}}$ *of Palm.*

The measure next larger in size to the *soss* was a measure of three sossi. It is almost the only length-measure of the tablet which is not somewhere represented by a single wedge. Its only occurrence is in Column I, sub-column 6, lines 7–13.

The interpretation of this character is based upon the fact that Column I is throughout its length a table of equivalents, every item in sub-column 6 being the equation of the corresponding item in sub-column 1. This principle of constructing Column I carries with it the meaning of this ideograph, both the characters and appearing in all their original clearness in lines 7 and 8.

The special value and use of a measure of this length will presently appear in the fact that it was the one-sixtieth part of the small ell.

(3) = *the Palm.*

Proceeding in the same direction as hitherto, from smaller to larger, we come to the ideograph for palm or hand-breadth. As this was the 'fundamental' from which all other measures were derived, either by division or multiplication, its written sign has more than an ordinary interest for the student.

The character itself appears in Columns I and IV.

In the former it is shown in every line of Sections C and D, having been effaced in but one of ten occurrences. It is here used in conjunction with the various fractions that constitute the hand-breadth, these rising from half-a-palm to $2\frac{1}{2}$ palms.

In Column IV its use is slightly different. It occurs on lines 2–8, in order to give the value of the figures in sub-column 6. These are, in this way, shown to be so many sixtieths of the palm, and therefore *sossi*. In lines 10–14 it serves a similar purpose for the figures in sub-column 4.

Its non-recital on line 9 is instructive. That being the line on which the 60 sossi was reached in the progression, no characterization was necessary, the single wedge (representing the completed palm) appearing in sub-column 6. Thus does the intentional omission of a character here tend to give validity to its insertion both above and below.

(4) (*or*) = 3-*palm Ell.*
= 4-*palm Ell.*
[1] = 5-*palm Ell.*

These three characters are taken together here, as they not only mutually illustrate each other's construction, but are found together at the foot of Column II, where they occupy a position of isolation on line 33, as indices of the various columns, or summaries of their contents.

First, as to their plan of construction. It will be seen that the upright wedge is common to them. This stands to the left in each character and is the symbol of unity or completeness.

At right angles to this are, in one case 3, in another 4, and in another 5 horizontal wedges, these being the number of palms of which the several ells respectively consisted.

If these index-characters be compared with those in the body of the tablet, a slight difference, not of shape, but of aspect, will be observed in one of them.

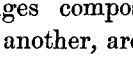
(*a*) The 5-palm ell has a long series of occurrences in Column IV, where its appearance corresponds with that at the foot of Column II. Its use, however, is to accompany the development of the double large ell from its earliest fraction of a single palm to its maximum of nine palms, when it is

[1] It is unnecessary to remark that the fish-tail is here the sign of an extra wedge.

merged into the third of a great reed of 1,800 sossi. This illustrative use of an ideograph seems to be a singular one in the whole of the document we are examining.

(*b*) The 4-palm ell does not appear as a 'character' in any part of the body of the tablet, though it is referred to by a series of single wedges in Column III, sub-column 6, lines 17–24. In this connection a comparison-study of Sections B and C should be found useful.

(*c*) The 3-palm ell has a fivefold appearance in Column III, sub-column 6, lines 12–16. It is not a matter of importance that the wedges composing it, while bearing the same relation to one another, are placed at a different angle. This is not unusual, and does not affect the value of the character.

(5)  = *Great Reed.*

Dr. Pinches' note on these two characters is as follows:—"These two characters cannot when side by side be separated, and in that case they stand for a well-known measure of length, 'the long road,' and, by extension, for the space of time known as a Babylonian hour (two of our hours), apparently the period needed to walk the distance indicated, i.e. about 7 miles."

I give this note as containing the Assyriologists' current view of the just interpretation of these associated characters. While not presuming to attempt to traverse these conclusions, I wish to place (beside them) the conviction forced upon me by the evidence of the Senkereh tablet as to what possibly was their earlier and more primitive meaning. It is that stands here for the instrument by which lands or roads were measured. We learn from Ezekiel (c. B.C. 600), who wrote in Babylonia, that the courts and open spaces about the temple were measured by a reed of six cubits, each of which was a palm-breadth longer than the cubits of the measuring line (Ezekiel xl, 5, and xlii, 16). May it not have been that originally this ideograph stood for the reed of measurement, and was afterwards transferred to the thing measured?

I take the ideograph to be an adjectival element governing its associated character, and representing that the reed intended is one of five-palm ells, there being *five* wedges in its figure.

Rawlinson's transcription of the Senkereh tablet gives this ideograph as occurring on ten lines of Column IV, i.e. throughout Section C, where it is obviously in place. But he also gives it as appearing in the ten corresponding lines of Column II, where it is as obviously out of place, having been, in all likelihood, copied as to its exact form from the clearer indentation of Column IV.

The character required in Column II is one of *three* wedges, and in Column III, where it has now been wholly effaced, one of *four* wedges.

To anyone who has examined the tablet at first hand, these suggested modifications and additions will not appear overbold, so bad in parts is its present condition.

(6) = + *or Plus.*

This character occurs authentically twenty-five times on Rawlinson's transcription, and the accompanying reconstruction diagrams show that it has been effaced in many other places, in seven of which Rawlinson suggests it. It is found only in Columns I and III as authentic.

Over the meaning of this character earnest consultations have taken place with one or more eminent Cuneiform scholars, as it is upon the significance and value of this element that previous attempts to interpret and reconstruct the Senkereh tablet have been based.

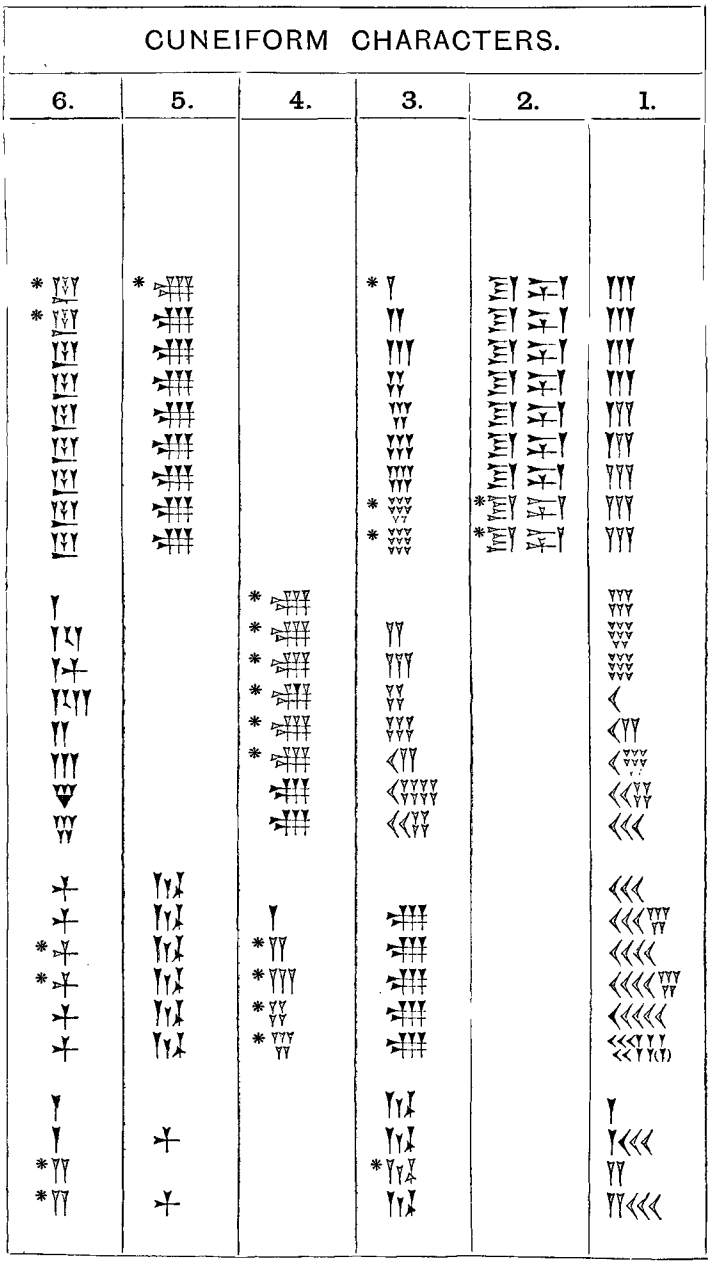
That in later Cuneiform writing means 'cubit' has been clearly and fully proved. With this knowledge philologists have approached the consideration of the tablet, and as a result have seen cubits in its first column, where we have found palms only. The consequence has been that Lenormant found acres and stadia within its four corners, and Lepsius stadia and parasangs. The former gives its total at 21,600 'lines,' and the latter

THE SENKEREH MATHEMATICAL TABLET.

THE SENKEREH

OBVERSE.

DIA-



N.B.—Characters in solid type are copied from the original tablet. Hollow type characters *with asterisk*, are those suggested by Rawlinson. Hollow characters are those conjectured by the Author.

NOTE.—The character in parenthesis ( ) in line 27, sub-column 1, is superfluous.

MATHEMATICAL TABLET.

GRAM IV. COLUMN I.

MODERN CHARACTERS.

KEY. Number of Sossi.	6.	5.	4.	3.	2.	1.
				Lines		
$3\frac{1}{3}$	$\frac{1}{20}$ P.	+		^{180}I	Sossi	^{60}3
$3\frac{2}{3}$	„	+		2	„	3
4	„	+		3	„	3
$4\frac{1}{3}$	„	+		4	„	3
$4\frac{2}{3}$	„	+		5	„	3
5	„	+		6	„	3
$5\frac{1}{3}$	„	+		7	„	3
$5\frac{2}{3}$	„	+		8	„	3
6	„	+		9	„	3
6	^{10}I			Soss.		6
8	I$\frac{1}{3}$		+	2		8
9	I$\frac{1}{2}$		+	3		9
10	I$\frac{2}{3}$		+	4		10
12	2		+	6		12
18	3		+	12		18
24	4		+	18		24
30	5		+	24		30
30	$\frac{1}{2}$	Palm				30
35	$\frac{1}{2}$	„	^{12}I	+		35
40	$\frac{1}{2}$	„	2	+		40
45	$\frac{1}{2}$	„	3	+		45
50	$\frac{1}{2}$	„	4	+		50
55	$\frac{1}{2}$	„	5	+		55
60	I			Palm		60
90	I	$\frac{1}{2}$		„		90
120	II			„		120
150	II	$\frac{1}{2}$		„		150

NOTE.—The conjectured character above in sub-column 4, line 14, Section B, is omitted as superfluous.

THE SENKEREH

OBVERSE.

DIA-

CUNEIFORM CHARACTERS.

	6.	5.	4.	3.	2.	1.
A						
B						
C						
	See next page.	= Great Ell of 300 Soss.	= Medium Ell of 240 Soss.	= Small Ell of 180 Soss.		= 3 the number of Reeds.

N.B.—Characters in solid type are copied from the original tablet. Hollow type characters *with asterisk*, are those suggested by Rawlinson. Hollow characters are those conjectured by the Author.

NOTE.—The conjectured characters with parenthesis ( ) in Section C, sub-column 1, are omitted in Transliteration as being erroneous. Of the 9 wedges following them, 1 is original and 5 are suggested by Rawlinson.

MATHEMATICAL TABLET.

GRAM III.

COLUMN II.

KEY. Number of Sossi.	MODERN CHARACTERS. 6.	5.	4.	3.	2.	1.
3 = 3 × 1	3					1
9 = 3 × 3	9					3
15 = 3 × 5	15					5
24 = 3 × 8	24					8
30 = 3 × 10	30					10
36 = 3 × 12	36					12
45 = 3 × 15	45					15
60 = 3 × 20	60					20
75 = 3 × 25	75					25
90 = 3 × 30	90					30
120 = 3 × 40	120					40
150 = 3 × 50	150					50
180 = 3 × 60	1	Small Ell		Sossi	[I P.]	60
240 = 3 × 80	1⅓	,,	+	20		1 digit
300 = 3 × 100	1⅔	,,	+	40		2 ,,
360 = 3 × 120	2	,,	+	60	[II P.]	3 ,,
420 = 3 × 140	2⅓	,,	+	80		4 ,,
480 = 3 × 160	2⅔	,,	+	100		5 ,,
540 = 3 × 180	3	,,	+	120	[III P.]	6 ,,
600 = 3 × 200	3⅓	,,	+	140		7 ,,
660 = 3 × 220	3⅔	,,	+	160		8 ,,
720 = 3 × 240	4	,,	+	1/3	[IV P.]	9 ,,
180 = 3 × 60	¼ [of 720]		Reed	3-Ell		I P.
360 = 3 × 120	½		,,	,,		II P.
540 = 3 × 180	¾		,,	,,		III P.
630 = 3 × 210	⅞		,,	,,		III½ P.
720 = 3 × 240	I		,,	,,		IV P.
960 = 3 × 320	I⅓		,,	,,		V⅓ P.
1,080 = 3 × 360	I½		,,	,,		VI P.
1,200 = 3 × 400	I⅔		,,	,,		VI⅔ P.
1,320 = 3 × 440	I⅚		,,	,,		VII⅓ P.
1,440 = 3 × 480	II		,,	,,		VIII P.
2,160 720						

= Palm = 60
= 60 × 5 = 300
= 60 × 4 = 240
= 40 × 3 = 120
720 × 3 = 2160.

[Total XII Palms.]

NOTE.—In sub-column 2 the Roman numerals are introduced to complete the system to the eye.

THE SENKEREH

OBVERSE.

DIA.

CUNEIFORM CHARACTERS.

	6.	5.	4.	3.	2.	1.
1						
5						
A						
10						
B						
15						
C 20						
25						
D						
30						

N.B. – Characters in solid type are copied from the original tablet. Hollow type characters *with asterisk*, are those suggested by Rawlinson. Hollow characters are those conjectured by the Author.

NOTES.—1. The 4 characters within brackets on line 16 are deemed to be superfluous. 2. The conjectured fractions in sub-column 6, lines 18 and 20, are replaced by others in the left panel. 3. The 5 conjectured characters in Section C, sub-column 5 – are found to be unnecessary.

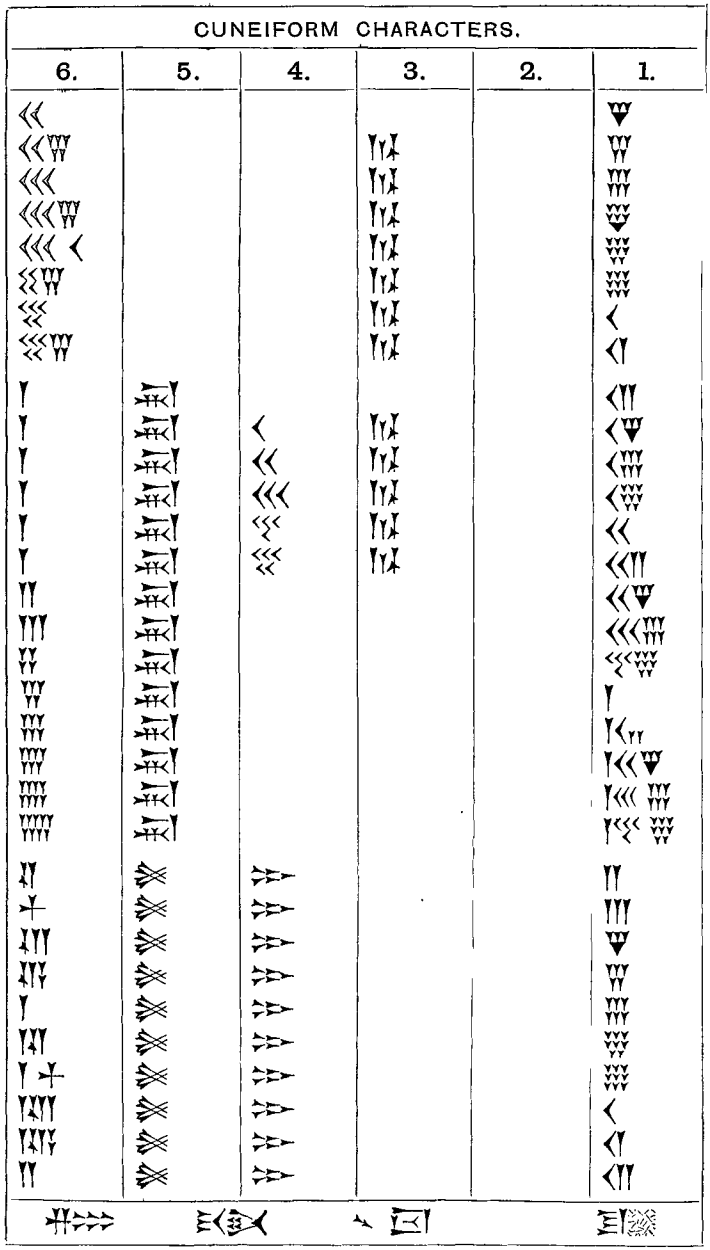
MATHEMATICAL TABLET.

GRAM II. COLUMN III.

KEY. Number of Sossi. ←	MODERN CHARACTERS. 6.	5.	4.	3.	2.	1.	
20 = 4 × 5	20					5	1
40 = 4 × 10	40					10	
60 = 4 × 15	60					15	
80 = 4 × 20	80					20	
100 = 4 × 25	100					25	5
120 = 4 × 30	120					30	
140 = 4 × 35	140					35	
144 = 4 × 36	144					36	
160 = 4 × 40	160					40	
180 = 4 × 45	Small Ell.					45	10
192 = 4 × 48	„	+	12	Sossi		48	
200 = 4 × 50	„	+	20	„		50	
208 = 4 × 52	„	+	28	„		52	
216 = 4 × 54	„	+	36	„		54	
224 = 4 × 56	„	+	44	„		56	15
232 = 4 × 58	„	+	52	„		58	
240 = 4 × 60	I [Me. E.]					I [Palm]	
320 = 4 × 80	$1\frac{1}{3}$ „					I + 20	
360 = 4 × 90	$1\frac{1}{2}$ „					I + 30	
400 = 4 × 100	$1\frac{2}{3}$ „					I + 40	20
480 = 4 × 120	2 „					II	
720 = 4 × 180	3 „					III	
960 = 4 × 240	4 „					IV	
1,200 = 4 × 300	5 „					V	
1,440 = 4 × 360	I	⪤	⪤			VI	25
1,680 = 4 × 420	I	Reed	4-Ell	$\frac{1}{3}$ [of 720]	+	VII	
1,920 = 4 × 480	I	„	„	$\frac{2}{3}$	+	VIII	
2,160 = 4 × 540	I	„	„	$\frac{3}{3}$	+	IX	
2,400 = 4 × 600	I	„	„	$\frac{4}{3}$	+	X	
2,640 = 4 × 660	I	„	„	$\frac{5}{3}$	+	XI	30
2,880 = 4 × 720	II	„	„			XII	

THE SENKEREH

OBVERSE.



NOTE.—The characters in Section C, sub-column 4, are retained as written. Those conjectured in the left panels of Columns III and II have been reduced in size and value.

N.B.—Characters in solid type are copied from the original tablet. Hollow type characters *with asterisk*, are those suggested by Rawlinson. Hollow characters are those conjectured by the Author.

MATHEMATICAL TABLET.

GRAM I.

COLUMN IV.

KEY. Number of Sossi.	MODERN CHARACTERS. 6.	5.	4.	3.	2.	1.	
20 = 5 × 4	20					4	1
25 = 5 × 5	25					5	
30 = 4 × 6	30			Of Palm		6	
35 = 5 × 7	35			,,		7	
40 = 5 × 8	40			,,		8	5
45 = 5 × 9	45			,,		9	
50 = 5 × 10	50			,,		10	
55 = 5 × 11	55			,,		11	
60 = 5 × 12	1 P					12	
70 = 5 × 14	1	In Gt. Ell	10	,,	+	14	10
80 = 5 × 16	1	,,	20	,,	+	16	
90 = 5 × 18	1	,,	30	,,	+	18	
100 = 5 × 20	1	,,	40	,,	+	20	
110 = 5 × 22	1	,,	50	,,	+	22	
120 = 5 × 24	2	,,				24	15
180 = 5 × 36	3	,,				36	
240 = 5 × 48	4	,,				48	
300 = 5 × 60	5	,,	[1 Gt. Ell]			1 [Palm]	
360 = 5 × 72	6	,,	[1 1/5 ,,]			1 + 12	
420 = 5 × 84	7	,,	[1 2/5 ,,]			1 + 24	20
480 = 5 × 96	8	,,	[1 3/5 ,,]			1 + 36	
540 = 5 × 108	9	,,	[1 4/5 ,,]			1 + 48	
600 = 5 × 120	1/3 [of 1800]	Reed	5-Ell			II	
900 = 5 × 180	1/2 ,,					III	
1,200 = 5 × 240	2/3 ,,	,,	,,			IV	25
1,500 = 5 × 300	5/6 ,,	,,	,,			V	
1,800 = 5 × 360	I [Gt. Reed]	,,	,,			VI	
2,400 = 5 × 480	1 1/3 ,,	,,	,,			VIII	
2,700 = 5 × 540	1 1/2 ,,	,,	,,			IX	
3,000 = 5 × 600	1 2/3 ,,	,,	,,			X	30
3,300 = 5 × 660	1 5/6 ,,	,,	,,			XI	
3,600 = 5 × 720	II ,,	,,	,,			XII	

= 3 = multiplier. 6, each = 360 × 6 = 2160.

= 4 = multiplier. each = 360 × = 2 = 720 ÷ = 10 = 72 × 40 = 2880.

[= 2] Duplicate.

= 5 = multiplier. = 3600.

= ? Colophon.

THE SENKEREH MATHEMATICAL TABLET.

ANALYSIS, SHOWING OCCURRENCES OF THE SINGLE WEDGE HAVING DIFFERENT VALUES, IN THE TABLET AS NOW RECONSTRUCTED.

DIAGRAM V.

Description.	Relative Value.	Distinguish as	Occurrences.							
			In Column I.		In Column II.		In Column III.		In Column IV.	
			Sub-Col.	Lines.	Sub-Col.	Lines.	Sub-Col.	Lines.	Sub-Col.	Lines.
Line	$\frac{1}{180}$ of Palm	180 𒁹	III	5–13						
Sossus	$\frac{1}{60}$ of Palm	60 𒁹	I III	5–31 15–21	I III	1–12 14–21	I VI	1–16 18–20 1–9	I I IV VI	1–17 19–22 10–14 1–8
Twentieth of Palm *	$\frac{1}{20}$ of Palm	𒐜	VI	5–13						
Twelfth of Palm	$\frac{1}{12}$ of Palm	12 𒁹	IV	23–27						
Tenth of Palm	$\frac{1}{10}$ of Palm	10 𒁹	VI	14–21						
Third of Palm or Digit	$\frac{1}{3}$ of Palm	3 𒁹			I	14–22				
The Palm	Fundamental	𒁹	VI	22–31	I	13 23–32	I	17–31	I VI	18–32 9–22
Small Ell	3 Palms	𒁹3 & 𒐜			VI	13–22	VI	10–16		
Medium Ell †	4 Palms	𒁹4			IV	33	VI	17–24		
Large Ell * †	5 Palms	𒁹5			V	33			V	9–22
Small Reed	4 Small Ells	𒁹6			VI	23–32				
Medium Reed	6 Medium Ells	𒁹7					VI	25–31		
Large Reed	6 Large Ells	𒁹8							VI	23–32

* This measure is shown in characters, not in figures.

† These measures are given also in their fractions: in Column III, Section D, the fractions are those of a Small Reed of 720 Sossi, giving Medium Ells; in Column IV, Section C, the fractions are those of a Great Reed of 1,800 Sossi, giving Great Ells, in the progression of figures, as shown in the key.

THE SENKEREH MATHEMATICAL TABLET.

TABULATED SCALE OF RELATED MEASURES AS DEDUCED FROM THE TABLET AS NOW RECONSTRUCTED.

DIAGRAM VI.

Description.	Line.	Soss.	Twelfth of Palm.	Tenth of Palm.	Third of Palm.	Palm.	Small Ell.	Medium Ell.	Large Ell.	1½ Small Reed.	Medium Reed.	Large Reed.	1½ Double Small Reed.	Double Medium Reed.	Double Large Reed.
Line	1														
Soss	3	1													
Twelfth of Palm	15	5	1												
Tenth of Palm	18	6	1⅕	1											
Third of Palm	60	20	4	3⅓	1										
Palm	180	60	12	10	3	1									
Small Ell	540	180	36	30	9	3	1								
Medium Ell	720	240	48	40	12	4	1⅓	1							
Large Ell	900	300	60	50	15	5	1⅔	1¼	1						
1½ Small Reed	3240	720 1080	216	180	54	18	6	4½	3⅗	1					
Medium Reed	4320	1440	288	240	72	24	8	6	4⅘	1⅓	1				
Large Reed	5400	1800	360	300	90	30	10	7½	6	1⅔	1¼	1			
1½ Double Small Reed	6480	1440 2160	432	360	108	36	12	9	7⅕	2	1½	1⅕	1		
Double Medium Reed	8640	2880	576	480	144	48	16	12	9⅗	2⅔	2	1⅗	1⅓	1	
Double Large Reed	10800	3600	720	600	180	60	20	15	12	3⅓	2½	2	1⅔	1¼	1

12,960,000 'lines.' I find but 10,800 'lines,' all of which are contained within the space of eighteen English feet.

This divergence is caused by my treating the document primarily from a mathematical point of view, and that I have no philological prepossessions. Seeing the unity and geometric accuracy of its *reverse* side, I am encouraged to find similar characteristics in its obverse. In so doing I am driven to the conclusion that whatever 𒌋 came to mean afterwards, at the time the tablet was written it meant *plus*, and *plus* only.

It does not fall within the scope of my present purpose to attempt the reconciliation of its earlier and its later significations. I see no reason, however, why to the variety of meanings which the sign already has, such as 'to eat,' 'food,' 'fodder,' 'green stuff,' etc., another should not be added, the more especially as its root-idea is in harmony with the meanings already accepted, all these being simply *additions* of one kind or another.

Thus understood, 𒌋 becomes the principal factor in the solution of the whole mystery of the Senkereh tablet, and enables it to be read with the consistency and coherency of a proposition of Euclid.

From considerations of space I must refer my readers, for the systematized results of the whole re-reading of the tablet, to the summarized contents of Diagrams V and VI. Attention is also called to the hitherto unmentioned numerical summaries at the foot of Columns II and IV.

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PART II: ON THE RESTORATION OF THE SCALE OF GUDEA AND ITS COINCIDENCES WITH THE SENKEREH TABLET.

1.

Having gained from the Senkereh tablet the *literary* evidence as to the number of ells used in Babylonia, together with that of their constituent fractions, we further require some *material* evidence from the same field, and of about the same age, in order to produce a working scheme which shall claim to reproduce the length-measures of 5,000 years ago. Evidence of this nature fortunately lies within our reach, and in the interior co-ordination of these two factors will lie the proof of the theory now for the first time laid before the public in its entirety. It will be apparent that if any one measure can be substantiated as being common to the two documents before us, the size of all the other measures can be derived from it. Also, that the most useful length which could be produced would be that of the 'fundamental' palm. Its discovery in a permanently concrete form would be in itself a most striking indication that the *antique* to which it belonged was of the same intellectual dispensation as the Senkereh tablet, in which, as we have seen, the palm takes the first place. These two discovered 'palms,' being placed side by side, should show such fractional affinities and identic subdivisions as will enable the archæologist to say: "These may belong to one civilization and to the same system of Metrology." Such is the nature of the case now to be laid before the Society, and it is upon these lines that the evidence will move. In considering it the jury will not lose sight of the fact that the new witness is a very ancient one, and that time has not failed to show its ravages here, as it has done on the face of its fellow-witness from Senkereh.

In 1881 M. de Sarzec undertook a series of excavations for the French Government in one of the *tells* of Babylonia, not far from Senkereh. This has since proved to be the site of the ancient city of Lagash or Lagas, the ruins of which are

130 miles south-east of Babylon. It is now known as the village of Telloh.

Buried in the courtyard of an archaic palace, M. de Sarzec found eight headless statues of diorite. These are now in the Louvre Museum, a cast of one of them having been presented to the Trustees of the British Museum (No. 91,025). Its notice-card bears the date of B.C. 2500.

This piece of engraved statuary represents King Gudea as a worshipper, in the act of dedicating his palace to the care of some deity. His hands are folded in the attitude of prayer, and on his knees lies a slab of stone. On this slab there is engraved the ground-plan of a building which was evidently of earlier erection than that of the palace, the courtyard of which still exists. Both these palaces stood upon the same site, and have a general likeness of plan to one another. On the slab, besides the ground-plan, are engraved two other details. One of these is a graving tool, which has no message for us, apart from the fact that it is similar in every respect to tools in use to-day.

The other is a record of the measure, or one of the measures, by which the palace was built. It is this feature of the slab which is now to claim our attention. The rule—known as the rule of Gudea—is in the form of a double line cut near the outer edge of the slab. In it are a number of indentations or cuts, which give to the rule its unique value and importance. It is to the great loss of ourselves that parts of this rule are missing, the two corners of the slab, i.e. those farthest away from the king's body, having been broken off and lost.

Many attempts have been made to restore, by conjecture, these broken-off portions, and thus to complete the rule, but none of these has met with general acceptance. The first was made by the discoverer, who gives to the slab a total length of 29 centimetres, and to the graduated scale, as restored by him, a length of 27 centimetres[1]=10·6301133 British inches. Professor Hommel gives to the rule an original length of

[1] "Découvertes in Chaldée," by E. de Sarzec, 1884–1889, plate 15.

249 millimetres,[1] or 9·80332671 inches. Professor Paul Haupt says, "The graduated portion of the rule of Gudea, on statue B, is $10\frac{1}{2}$ inches, while the entire length of the rule is $10\frac{3}{4}$ inches."[2]

These varying lengths would seem to have been arrived at by reading the cuttings of the rule from the left-hand side of the figure. Also, I have not seen it remarked that the slab itself is not rectangular.

An original measure of the slab at the edge nearest to the king's body gives $11\frac{1}{5}$ inches as the length. If the existing lines at either side be produced, they will show a contraction of two-fifths of an inch in the length of the slab. It is at this point that the first, or inner, line of the rule is met.

The rule itself is to be credited with corners which were right angles. We thus arrive at the conclusion that the rule was $10\frac{4}{5}$ inches in length. This is the measure which Dr. Oppert gives as the result of the measurement of the walls of Khorsabad. His words are, "The Assyrian span is therefore exactly $10\frac{4}{5}$ inches." See *Records of the Past*, new series, vol. xi, for 1878, pp. 22–23.

2.

Having, with Oppert's support, arrived at the first result in a length of 10·8 inches, we have further to see what were the interior divisions of this space, as denoted by the cuttings which still remain on it, many others having doubtless been effaced.

It is at this point that I part company with my predecessors in the attempt to solve these difficulties. The length I give to the rule differs but slightly from that of the French *savant* who first gave attention to it. But in the matter of its interior economy *I begin at the other end.* The data of De Sarzec and Hommel are shown at *b* and *c* on the accompanying drawing. Mine may be seen at *a*, where, as at *b*, are opposite cuts in the rule.

[1] Article *Babylonia*, Hastings' Dictionary of Bible, vol. i, p. 218.
[2] Ezekiel vol. of the Polychrome Bible, p. 180, note.

It is these opposite cuts that, by the plan herein adopted for determining the original length of the rule, mark its 'third,' there being to their left twice the distance that there is to their right. If, however, the same distance of 3·6 inches be measured from the other end of the rule, it will be seen that there are no double cuts at the 120th soss, thus showing that the rule did not consist of three equal spaces, but of two divisions, of which one was double the length of the other. This fact will have an important bearing upon its analysis and reconstruction, now to be entered upon.

(*a*) The smallest measure of the Senkereh tablet is the line,' three of which went to each soss. The same relation is given in the Gudea Scale, though the process of development naturally differs. In this case the exposition begins on the front edge of the rule, and at its right side.

Here we find the remains of seven cuts, which once stood opposite the same number on the inner side, these latter still existing. In each case these seven cuts on either side enclosed six spaces, each of the width of two sossi. The six spaces on the inner side were (as now) clear and distinct. Those on the outer side, now partly defaced, were the scene of the demonstration. This was effected by leaving every other space vacant, and by dividing the three intermediate spaces into 2, 3, and 6 divisions. These were the consecutive fractions of 2—soss spaces—showing the widths of 1 soss and $\frac{2}{3}$ and $\frac{1}{3}$ soss. Few traces of these minute subdivisions, though engraven in the rock, could be expected to withstand the disintegrations of millenniums of years. But enough remains to show how the system was developed—the 'system' being that familiar to us in the columns of the Senkereh tablet, as we shall see.

3.

It has already been shown that the first column of the Senkereh tablet is devoted to an explication of the palm in its various fractions and larger relations. It has been already suggested that the 'third' of the Scale of Gudea, marked

as division I, is an embodiment of the same fundamental measure. There should then be discoverable in *this* the same, or some of the same, fractions as we have found in *that*. Nor is this expectation disappointed.

(*b*) The first division of the palm was into digits, of which three went to its width. It is one of the vexations of the case that the space given to the digit on the slab of Gudea has been torn away by one-half its length. It was contained in the right-hand corner of the rule, there being nothing else with which to fill up the space between the enclosing line and the first cut. This space is exactly that of 20 sossi, and may justly be taken as having been meant to show the length of the digit.

(*c*) Next to the width of the digit on the scale come three spaces marked B, C, and D. Of these C forms a blank between the other two—a device we have already seen used in the case of the 'line.' B and D are composed of double-sossi, the one containing *six* and the other *five* such parts, their values being respectively one-fifth and one-sixth of a palm. These two spaces of ten and twelve sossi show that the system of the slab, like that of the tablet, is both decimal and duodecimal. This will be seen to be a point of cardinal importance, as establishing the relationship of the two witnesses; the variation in the mode of exhibition (one showing 5's and 6's, and the other 10's and 12's) being an additional point in their favour, as being the work of two men, essentially the same in system and yet differing in the mode of presentation.

4.

Having shown some points of harmony between the 'palm' of the tablet, in its first column, and that of the Gudean scale in its first division, it is now advisable to see if similar coincidences do, or do not, exhibit themselves in the remaining portions of these two independent witnesses.

In making these investigations, it is of importance to remember that the Scale of Gudea does not consist of three

separate and clearly defined palm-lengths. As there is no double cutting opposite to the 120th soss, it is evident that division I was of the length of a single palm and division II of the length of two palms.

Looking at De Sarzec's reproduction of the cuttings found in the maimed rule (none of which are disputed in my transcript), it is not difficult to see what was its plan of construction. In order to do this, the cuttings on its inner line must now be read from *left to right*, i.e. from the left of the royal figure.

These cuts, when not single, show that with intermediate blank spaces, as elsewhere, there were five detailed spaces given, containing respectively 2, 3, 4, 5, and 6 interior divisions. The conjectural restoration of the scale, adhering to these distances in detail C, shows that their contents were as follows:—

(1)	Subdivision	K, 2	spaces of	5	sossi each.
(2)	,,	H, 3	,,	4	,,
(3)	,,	F, 4	,,	3	,,
(4)	,,	D, 5	,,	2	,,
(5)	,,	B, 6	,,	2	,,

The last of these, B, has already been dealt with on a previous page, in illustration of the sossus and the 'line.' This removes it from the necessity of further remark here, as, beyond the fact that it is in the progression 2–6 spaces, above stated, it does not belong to the series of exhibits now engaging our attention. Its contents of two-soss spaces is in favour of this separation, as these spaces had already been delimited in subdivision D.

Taking the four subdivisions D–K, together with the minutiæ of B as previously explained, it will be seen that they cover the whole ground of the units of measurement, as well as of their fractions of $\frac{1}{3}$ and $\frac{2}{3}$. With this scale before him, any workman of ordinary intelligence could derive from it instruction as to any of the 30 lengths which are contained within the width of 10 sossi, equal to $\frac{1}{4}$ of an inch. It is probable that these fine gradations of

measurement were necessary for the engraving of precious stones and of seals, of which we know that large numbers were used in Babylonia, the British Museum alone having a collection of many hundreds from there.

A comparison of Details A, B, and C, on the accompanying plan, will show that to the left of his datum at *b*, M. de Sarzec could not have found more than two or three of the five spaces recorded in his full-length rule, inasmuch as the slab is here broken away. I am, however, inclined to think that his suggestion of five equal spaces to the left of *b* is correct, and have marked that number in my conjectural restoration. To these spaces I give a uniform width of 10 sossi, and find them separated, by subdivision I, from the sixth tenth, which, on the right, is repeatedly cut up into its units, as we have seen. This separation-device is everywhere apparent in the rule, and was necessary to prevent overcrowding and obscurity.

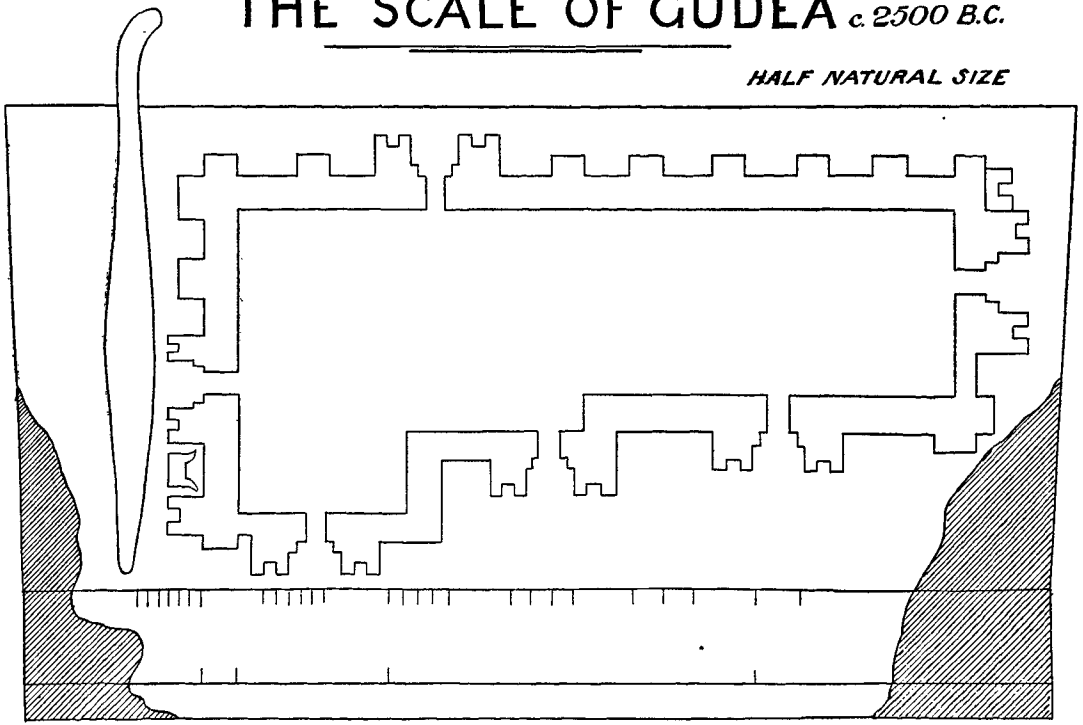
That there should be five complete decades of sossi, and that a sixth decade should be divided into its elemental units, is in harmony with the Babylonian system of notation. The statement of Berosus already quoted, that the Babylonians made use of a decimal notation, is not to be understood in the sense of their having used hundreds and thousands; but, rather, that the sexagesimal system was commonly divided into 6 decades of 10 each. To this the whole reading of the *scheme* of the Senkereh tablet bears witness. On its reverse face are about 100 examples in which totals are worked out, the highest result being 27,000. All these are given in sixties, or in sixties-of-sixties. In another tablet, a portion of which is transcribed on the same plate as Rawlinson's reading of the Senkereh tablet, 3,600 is indicated by a single upright wedge[1]—being 60 × 60. So immutable was the system of sixties!

It is therefore requisite that the systems, both of the *obverse* of the tablet and that of the Gudean scale, should not transgress this cardinal rule in crucial cases, either by overstepping

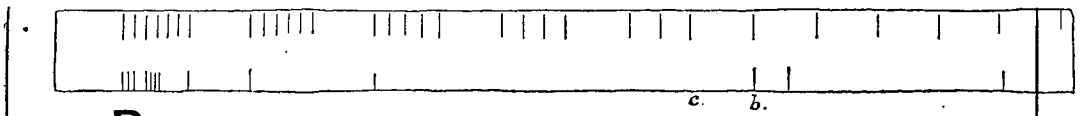
[1] As is also done in the character immediately preceding the colophon of the Senkereh tablet.

THE SCALE OF GUDEA *c. 2500 B.C.*

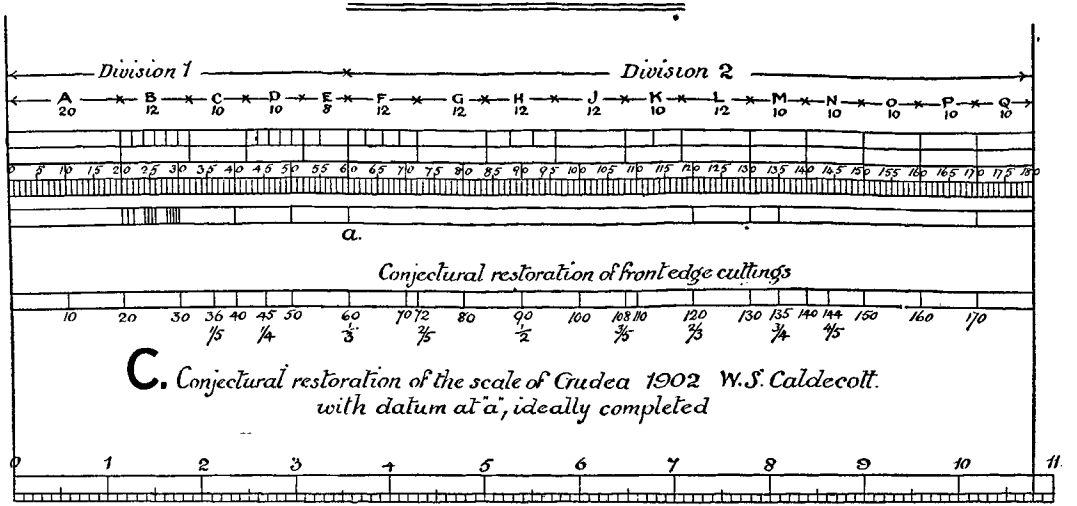
HALF NATURAL SIZE



A. THE SLAB OF GUDEA, *taken from the original in Paris, showing the ground-plan of Gudea's palace at Lagash [Telloh] with scale of construction.*



B. *De Sarzec's reading of the scale of Gudea. 1889.*
De Sarzec's datum at "b", Hommel's datum at "c"



C. *Conjectural restoration of the scale of Gudea 1902 W.S. Caldecott.*
with datum at "a", ideally completed

it in larger numbers or by falling short of it in lesser numbers. Nor do they. Each conforms to it, and the fact that the second division of the Gudean scale exhibits five decades in full, and a sixth decade in units, shows how completely it fulfils this primary condition of acceptance.

5.

Upon the general agreement of the Gudea Scale with the Senkereh tablet the whole case for the Metrology of ancient Babylonia here rests. If, however, we compare the 3-palm length of the Gudea Scale with the 3-palm ell of the tablet, as to their respective fractions, an accidental illegibility of the tablet in this portion of its obverse will deprive our conclusions of much of their force. Two of the original characters alone remain (Column II, lines 6–7), each of which requires some addition to its value to fit it into the system. The first twelve lines of the column, however, are a silent witness to the fact that they once bore as many fractions of the single palm, and that these twelve relative constituents of the palm were also those of the Short Ell, the *nexus* between the two being the unexpressed multiplier 3.

A hitherto little noticed peculiarity of Column II is the fact that it contained a twofold set of measures. In Sections A and B 4 palms are worked out—partly in smaller palm-fractions and partly in digits—to a length of four small ells. The nine digits alone remain as evidences of this operation—but they are enough. In Section C, which is in much more perfect condition, a fresh set of measures is evolved. Here 8 palms are worked out into two small reeds — 3 being throughout the multiplier of this column.

In this unusual way two uniformities are maintained. One is that the first sub-column in each of Columns II, III, and IV shall consist of 12 palms. The other, that the total exhibited in the sixth sub-column of each of the columns shall be 2 reeds. It follows that the reeds of Column II consisted of 4 ells, and those of Columns III and IV of 6 ells each. So radical a dislocation of the system could

only have been caused by some sufficient reason, and have been redeemed by some well-known application of these earlier measures. My own suggestion is that A and B were goldsmith's or jeweller's measures, a suggestion which is supported by evidence that lies outside the scope of this paper.

This supposed exceptional use of the short ell is limited to the upper portion of the column. The third section, C, takes its place as giving the fractions of the double small reed, which may have had another use. It will be remembered that a reference has already been given to the fact that the walls of Khorsabad were measured in 'spans,' the length of each being that of a small ell (= 10·8″).

Though $\frac{9}{10}$ of a foot happens to be the actual length of the Gudean scale, we are not at liberty to limit its use to this length. Its design, as composed of a single and a double palm-length—each clearly separated from the other—would enable any workman to derive from it the length of an ell of 4 palms (= $1\frac{2}{10}'$) and one of 5 palms (= $1\frac{5}{10}'$). It was not necessary to elaborate these in the small space at the disposal of the sculptor, nor was it possible.

The 'palm' being fundamental in both records before us, the following Table will show its fractions as drawn from the rule of Gudea.

No.					Relation to Palm.	Value in inches.
(1)	1	line	= $\frac{1}{3}$	of sossus	$\frac{1}{180}$	$\frac{1}{50}$
(2)	2	,,	= $\frac{2}{3}$	,,.	$\frac{1}{90}$	$\frac{2}{50}$
(3)	3	,,	= 1	,,	$\frac{1}{60}$	$\frac{3}{50}$
(4)			2	sossi	$\frac{1}{30}$	$\frac{6}{50}$
(5)			3	,,	$\frac{1}{20}$	$\frac{9}{50}$
(6)			4	,,	$\frac{1}{15}$	$\frac{12}{50}$
(7)			5	,,	$\frac{1}{12}$	$\frac{15}{50}$
(8)			6	,,	$\frac{1}{10}$	$\frac{18}{50}$
(9)			10	,,	$\frac{1}{6}$	$\frac{30}{50}$
(10)			12	,,	$\frac{1}{5}$	$\frac{36}{50}$
(11)			20	,,	$\frac{1}{3}$	$1\frac{1}{5}$
(12)			60	,,	1	$3\frac{3}{5}$

All these fractions, together with many others of larger measures, occur on the obverse face of the Senkereh tablet. It is in this coincidence, so often repeated, that we find the correspondence of the Gudean scale and the Senkereh tablet with the early metric system of Western Asia, which hitherto has been unknown.

This conclusion may prove to be a key which will fit the wards of many locks, and may give entrance to new fields of investigation, for "science is measurement."

Taking the human hand as having an average, and agreed-upon, width of one-tenth of a yard or three-tenths of an English foot, we have in the sixth diagram of the series a complete metrological system which begins at one-fiftieth of an inch and admits of indefinite extension and application. As the experiment of *inductive* metrology has hitherto failed to lead to one definite standard of measurement for antiquity, the subject of *comparative* metrology may possibly find in this study a solution of some hitherto unexplained variations.

ART. IX. — *Notes on Indian Coins and Seals.* Part V.
By E. J. RAPSON, M.A., M.R.A.S.

INDO-PARTHIAN: GONDOPHARES (*Indian Coins*, §§ 61, 62).

1. *Obv.* ΒΑCΙΛΕΩΝΒΑCΙΛΕΩΝ | ΓΟΝΔΟΦΑΡΟΥ. King r. on horseback, holding whip (?) in r. hand extended; to r., symbol[1]; between horse's hind feet 𐨕𐨪 (Kharoṣṭhī, *jhaṃ*).

Rev. 𐨪𐨪𐨪

of the Kharoṣṭhī inscription are in the genitive case; in the latter, the name only is in the genitive, and the titles are given in their undeclined base-form, as if they were the first part of a compound which the name was intended to complete. In the case of both, and wherever else it occurs on the coins of Gondophares, there can be no doubt that the correct title is *devavrata*, 'devoted to the gods,' and not *devatrāta* or *devahada* as hitherto read; that is to say, the third *akṣara*, on good specimens, seems to be undoubtedly intended for [illegible] rather than for [illegible] or [illegible].

KUṢANA: KUJULA-KADPHISES (*Indian Coins*, § 65).

2. *Obv.* K□[ΓCNAK□Σ□YΛ]□KAΔ□IΣ□Y. Bust of Hermaeus r.

Rev. . . . . . [illegible]

Kuju]*la-kassasya Kuṣanaya*[*vuga* . . . . . .]

Herakles; r. [Kharoṣṭhī *tu*[1]]; l. [illegible] Kh. *dhra*.

Mr. R. W. Ellis. Æ ·9; Wt. 135·5. Pl. 2.

This coin is interesting chiefly on account of its Kharoṣṭhī inscription. The third, fourth, and fifth *akṣaras*—possibly also the second, but this is not quite clear—have, added to their base, an angle, the use of which is not apparent. The same peculiarity characterises the same *akṣaras*, so far as they can be read, on a coin of Kujula-Kadphises in the B.M. (Cat., p. 122, No. 7[2]), and is found also in the coin-legends of Pacorus, where similar *akṣaras* seem to have it as regularly in some positions as they have it not in others.[3]

There seems to be little doubt that the fifth *akṣara* is intended for *-ssa*, a reading which has already been noticed

[1] The remaining traces, and a comparison with the similar coin quoted below, justify this restoration; *v.* note 2.

[2] The second Kharoṣṭhī character in the field should be corrected to *tu*.

[3] *E.g.*, in the first two titles of the inscription, viz. *mahārājassa rājātirājassa*, the *akṣara rā* occurs three times. In the first case it never has the angle; in the second and third always (*cf.* B.M. Cat., pl. xxiii, 8).

by Professor Franke as occurring on a coin of Kujula-Kadphises in the Berlin Museum.[1] The sixth *akṣara*, here read as *-sya*, is like the form given in Bühler, *Indische Palaeographie*, Taf. i, xii, 36. The Sanskrit genitive termination *-sya* seems not to be found elsewhere on these coins. Taken together with the form *dharmathida*, which is sometimes found as an alternative to the more usual *dhramathida*, one of the titles of Kujula-Kadphises, it seems to show that the Prakrit of these coins has a tendency to approximate to Sanskrit.

AYODHYĀ: KUMUDASENA (*Indian Coins*, § 44).

3. *Obv.* '*Tri-ratna*' symbol within railing.
Rev. (In incuse square) Humped bull to l.; in front, triangular symbol (?) on the top of a pillar surrounded by a railing; behind, curved staff; beneath, राज्ञः कुमुद्सेनस (*Rājñaḥ Kumudasenasa*).
B.M.; Mr. H. Nelson Wright, 1900: 1–2: 1.
Æ ·85; Wt. 125·5. **Pl. 3.**

This unique coin, which was presented to the British Museum by Mr. H. Nelson Wright in 1900, adds a new member to our list of the kings of Ayodhyā.[2] The inscribed coins attributed to Ayodhyā fall into two classes, (1) square cast, and (2) round struck. The present specimen belongs to the latter, and, like the coins of this class generally, it has the side bearing the name of the king struck in incuse, but with this peculiarity, that in this case the incuse is square while in all other cases it is round.

The incuse square is characteristic of some of the coins of Kauśāmbī, Mathurā, and Pañcāla,[3] and is probably the result of impressing a square die on a lump of metal in a semi-molten state.[4] It is, therefore, not of Greek origin, as might

[1] *Z.D.M.G.*, 1896, p. 604, in the word [*yav*]*ug*[*a*]*ssa*. But is it not rather *-sya*?
[2] For the coins of Ayodhyā, *v.* Cunningham, *Coins of Ancient India*, p. 90.
[3] *Indian Coins*, §§ 49, 52, 53.
[4] *v. Indian Coins*, Taxila, § 56.

at first sight be supposed; but it is the outcome of a method of coining which seems to have been peculiarly Indian, by which the die was impressed on the softened metal almost like a seal on sealing-wax. It never occurs on Indian coins which are manifestly of Greek origin, such as the Græco-Indian and the various Indo-Scythic series, with the solitary exception of the square copper coins of Pantaleon and Agathocles, in which the influence of the earlier native coinage of Taxila predominated.[1] These coins of Pantaleon and Agathocles, the dates of which, in all probability, fall within the first twenty years of the second century B.C., are, therefore, most important as affording a fairly fixed point in the chronology of Indian numismatics from which earlier forms and later modifications of the coinage may often be approximately dated. The Indian incuse square was certainly used in the coinage before this period, and, no doubt, persisted for a length of time which can only, at present, be very vaguely estimated, afterwards; and it may, perhaps, be laid down as a general rule that it is deepest on the earliest coins on which it occurs, and becomes less and less distinct as time goes on—*cf.*, for instance, the early coins of Taxila with some of those struck by the Śaka Satraps and the Hindu Princes of Mathurā.[2] Moreover, as the earliest form of this incuse, like the shape of the earliest Indian coins, is square, it may, perhaps, be assumed generally that coins having a circular incuse are later in date. If so, our coin must be placed first in the series of the struck coins of Ayodhyā as known at present. The '*tri-ratna*' symbol, which forms the obverse, is found also on the coins of Vijayamitra.[3]

SATRAPS OF MATHURĀ: ŚODĀSA (*Indian Coins*, § 32).

4. *Rev.* . जु[व]खपुचस[——. Standing figure with r. hand raised; to l., waved line.

B.M.; Bhagvānlāl, 89: 1–5: 1173.

Æ ·65; Wt. 41. **Pl. 4.**

[1] *Ibid.*
[2] Cunningham: *C.A.I.*, plates ii and viii.
[3] *C.A.I.*, pl. ix, 19.

This coin and another, in the British Museum, acquired from Lady Clive Bayley in 1889, show that Śoḍāsa is called 'the son of Rājuvula' on his coins, for there can be no doubt that the first part of the inscription on them must be restored as *Rājuvulaputrasa*. The latter part is, unfortunately, quite illegible. It may have been either *Khatrapasa Śoḍāsasa* or *Mahā°*. Śoḍāsa was, of course, known to be the son of Rājuvula from the inscription of the Lion-Pillar discovered by Paṇḍit Bhagvānlāl Indrājī,[1] but it has not hitherto been noticed that the same fact is recorded on his coins.

Similarly, it has not hitherto been noticed that Śoḍāsa struck coins as Mahākṣatrapa, although it is well known that he appears with this title on inscriptions.[2] A coin, presented to the British Museum in 1892 by Colonel Sir (then Major) R. C. Temple, reads quite clearly *Mahākhatrapasa Ś[o]ḍ[ā]sasa*.

The known coin-legends of Śoḍāsa, all in Brāhmī characters, are, therefore, as follows :—

(1) *Mahākhatrapasa putrasa khatrapasa Soḍāsasa.*[3]

(2) *Rājuvulaputrasa* [———.

(3) *Mahākhatrapasa Śoḍāsasa.*

? Satraps of Mathurā : [uncertain].

5. *Obv.* Twelve dots in four rows of three each.

Rev. ब्रह्मणा[न गो(?)ड व(?)—थ(?) . न]. Standing figure with r. hand upraised; l., a water-jar; r., tree within railing.

Mr. L. White King. Æ ·6 ; Wt. 20·5. **Pl. 5.**

[1] *J.R.A.S.*, 1894, p. 546.

[2] *E.g.*, Bühler, *Ep. Ind.*, ii, p. 199.

[3] *J.R.A.S.*, 1894, p. 547. The *akṣara tva* seems to be invariably found on these coins—not *ta* as previously read. On coins, whenever the name is legible, the first *akṣara* seems to be *Śo*. The alternative forms *Śu°* and *Śau°*, given by Bhagvānlāl and Cunningham respectively, cannot be certainly read on any of the specimens in the British Museum.

The general similarity of this coin to those of Śoḍāsa makes its attribution to the Satraps of Mathurā not improbable; but, unfortunately, only a portion of the inscription can be read with certainty.

The first three *akṣaras* are plainly *bra-hma-ṇā*, and the fourth is apparently *-na*. If this reading be correct, we have here a title (*brāhmaṇānāṃ*) in the genitive plural; and it would not be unreasonable to expect after it a compound made up of at least two names also inflected in the genitive plural.[1] As there are traces of what seems to be a *na* (*nāṃ*) at the end of the inscription, it is not improbable that such a compound actually did form the latter part of this coin-legend; but, unfortunately, it is impossible from the existing traces to restore the actual names. After *brahmaṇā*[*nāṃ*] there are traces of three *akṣaras*. The first may be *go* or *śo*, the second seems to be *ḍa*, and the third may be *va*. It is tempting, of course, to suggest the name *Śoḍāsa*; but it seems impossible to read the last *akṣara* as *sa*. After these three *akṣaras* there are very doubtful traces of others, including, perhaps, a *tha* before the final *na*.

The 'twelve dots in four rows of three each' of the obverse-type are not easy to explain; but there seems to be a tendency of the obverse-types on the coins of the Satraps of Mathurā, indistinct and confused as they are at the best, to degenerate into clusters of dots.[2]

The title *brāhmaṇa* may be compared with [*ma*]*ha-*

[1] In the parallel instance *Khatapāna Hagānasa Hagāmaṣasa*, we have a gen. pl. in apposition to two genitive singulars. (Mr. Burn, referring to Cunningham's description in *C.A.I.*, p. 87, first pointed out to me that the first name, as well as the second, was in the genitive. He also observed that on one of his own specimens the standing figure which usually appears on the coins of the Satraps of Mathurā is shown horizontally above the first line. This figure also appears on the specimen published by Cunningham, but in the plate (viii, 7) it is represented as upright, with the inscription in three vertical lines to the left of it. An examination of the actual coin also shows that on the other side of the inscription a tree is represented. It may be observed that the standing figure and the tree, here represented separately, occur together on the coins of Rājuvula, Śoḍāsa, and Hagāmaṣa.)

[2] This tendency is shown, for instance, in the coins of Balabhūti. *Cf.* two specimens in the B.M.—Cunningham, 94: 5–7: 181 (=*C.A.I.*, pl. viii, 8, indistinctly photographed), and Major R. C. Temple, 92: 10–8: 195. Somewhat similar is the cluster of dots seen in the representation of the six-headed deity on certain coins of the Yaudheyas; *v.* Cunningham, *C.A.I.*, pl. vi, 9, 11, 12.

bra[*hmaṇa*], which seems to occur as the *latter* part of the inscription on another specimen of this class in the collection of Mr. White King. It was read by Cunningham also on some coins of the Yaudheyas,[1] but the correct reading on these coins seems undoubtedly to be *Brahmaṇya* (*Deva*), the name of the Yaudheya king to which the type of the 'six-headed' deity (*Ṣaḍānana, Brahmaṇya,* or *Kārttikeya*) also alludes.[2]

? KANAUJ : JAYA-PURAHĀ (*Indian Coins*, § 110 (1)).

6. *Obv.* Figure of Garuḍa to l.
Rev. Viṣṇu represented in his boar-avatāra to r.; जयपुरहा (*Jaya Purahā*).
Mr. Vincent Smith. Æ ·75. **Pl. 6.**

The title *Purahan* is applied to Viṣṇu as the slayer of the demon Pura,[3] and the types of both obverse and reverse of this coin refer to him. It has, therefore, characteristics in common with those coins which bear the title *Śrīmad-Ādi-varāha,* with the figure of Viṣṇu in his boar-incarnation, and those with the legend *Śrī-Trivi*—almost certainly to be regarded, with Cunningham, as an abbreviation of *Śrī-Trivikrama*—and a prostrate figure, probably that of a slain demon.[4] *Śrīmad-Ādi-varāha* has been shown by Dr. Hultzsch[5] to be a title used by King Bhojadeva of Kanauj (*c.* A.D. 850–900); and it would, therefore, seem not unreasonable, in the lack of definite evidence, to attribute provisionally the other coins of this class to the same dynasty — the Raghuvaṃśin dynasty of Kanauj—although it is not yet possible to identify the monarchs who bore the titles *Jaya-Purahan* and *Śrī-Trivi*(*krama*) on their coins.

A question arises as to the meaning of the first part of the legend *Jaya-Purahā.* Is *Jaya* simply part of a compound

[1] *C.A.I.*, p. 78, pl. vi, 9, 11–13.
[2] *Indian Coins*, key to pl. iii, 15.
[3] *E.g.*, in the *Bhāgavata Purāṇa*, vii, x, 68.
[4] *C.M.I.*, p. 54, pl. vi, 22.
[5] *Ep. Ind.*, i, p. 155.

name, as in *Jayadeva*, *Jayacandra*, etc., or is it the 2nd singular imperative of the verb *ji*? Perhaps more probably the former, since, if it were a verb, it should, strictly speaking, be in the 3rd person, as we have the nominative *Purahā*, not the vocative *Purahan*; *cf.* the legends on the coins of the Hūṇas, *jayatu Vṛṣadhvaja*[*ḥ*],[1] etc.

? AHICCHATTRA: Pū—— (Smith, *J.R.A.S.*, 1897, p. 862).

7. *Obv.* Wheel with spokes.
Rev. In incuse, 𑀧𑀽 (Brāhmī *Pū*) within circle of dots.
B.M.; Cunningham, 94: 5–7: 1328. Æ ·6; Wt. 46 grs. **Pl. 7.**

When I wrote my *Indian Coins* I hazarded the conjecture (§ 101) that the Acyuta, who is mentioned in the Allahabad inscription of Samudragupta, and to whom certain coins reading *Acyu-* had then recently been attributed, might have been one of the Nāga kings of Padmāvatī (Narwar). Mr. Vincent Smith subsequently showed that he was more probably king of Ahicchattra (Ramnagar).[2] The present coin may, perhaps, belong to another member of the same dynasty. The type of the wheel, although of a somewhat different form in each case, seems to form a connecting link between these two classes. *Pū* is probably the initial *akṣara* of the king's name — possibly some compound beginning with *pūrva* or *pūrṇa*.

[UNCERTAIN]: RĀYA MURĀRI.

8. *Obv.* Man, holding an elephant-goad, riding on an elephant running to r.; circular border of dots.
Rev. श्रीराय । मुरारि । ? । square border of dots.
Mr. Vincent Smith. Æ ·75; Wt. 56. **Pl. 8.**

[1] Cunningham: *N. Chr.*, 1894, pl. x, 4. *Vṛṣadhvaja*[*ḥ*] is, no doubt, to be taken as a *bahuvrīhi* compound = 'He, whose banner is the bull'; *cf.* *Makaradhvaja* and *Makaraketu*, epithets of Kāmadeva. The legend of the bronze coins of Mihirakula, *jayatu Vṛṣa*[*ḥ*], is probably an abbreviation.
[2] *Loc. cit.*

This coin has already been published by Mr. Vincent Smith in the *Journal of the Asiatic Society of Bengal*, 1897, p. 309 (pl. xxxviii, fig. xiv), but there can be no doubt that the reading of the inscription should be given as above. It is not quite certain whether the traces remaining on this coin are those of a third line of inscription or of some ornament—perhaps the conch-shell, an emblem of Viṣṇu. As Mr. Vincent Smith rightly says, the characters are late mediæval. They may be, perhaps, of the ninth or tenth century A.D.

Murāri, like *Purahan*, is an epithet of Viṣṇu, the slayer of the demon Mura.[1] It is possible that this coin may also belong to Kanauj. It is like the coins with the inscriptions *Śrīmad-Adi-Varāha* and *Jaya-Purahā* in having a name of Viṣṇu, which may possibly have been adopted by some king as his title. It seems, at first sight, to be unlike them in not having for its type the representation of some avatar of Viṣṇu. What exactly is meant by the type, "a man, holding an elephant-goad, riding on an elephant," is doubtful; but it must be borne in mind that the obverse of the coin is somewhat rubbed, and it is quite possible that there may have been originally some other figure as well as the elephant-rider — some demon, perhaps, whom he is slaying—and that, after all, the type may refer to some incident in the history of Viṣṇu, perhaps even to his slaying of the demon Mura. These and other doubts can only be solved by the discovery of other and better specimens of this coinage.

The form *Rāya* for *Rāja* is common enough in different parts of India and at very widely separated periods, for instance occasionally on coins of Gondophares (Indo-Parthian, 1st cent. A.D.)—*maharayasa rayarayasa*[2]—and regularly in the names of the kings of Vijayanagar (14–16th centuries), Kṛṣṇa-Rāya, Acyuta-Rāya, etc. This being the case, no argument can, apparently, be drawn from its use on the

[1] See the references given *s.v.* in *P.W.*
[2] Gardner: *B.M. Cat.*, p. 104, Gondophares, No. 9.

present coin to help in determining the locality in which it was struck.

[UNCERTAIN] (*Indian Coins*, § 122 (1)).

9. *Obv.* [श्री] । [र] यम ।
Rev. Degraded representation of the Sassanian Fire-Altar.

Mr. L. White King. Æ ·7; Wt. 59·5. **Pl. 9.**

This coin belongs to that class of mediæval Indian coins derived from the Sassanian type which cannot as yet be attributed with much exactness as regards either locality or date. It is interesting as having an inscription which has not hitherto been noticed in this series; but this inscription, unfortunately, cannot be read with any certainty. The top line is quite doubtful. There are, apparently, traces of श्री; but this is by no means certain, and there may have been one or more *akṣaras* before it. The character conjecturally restored as *ra* in the second line is equally uncertain. It is possible that, as in the case of the coin just noticed, we may have the title *Rāya*, and *Ma* may be the initial *akṣara* of the king's name or title; but, perhaps, when so much is doubtful, it is better to abstain from conjecture altogether.

As in so many other Indian series, we have here an example of the debasement of coinage. The coins of Sassanian derivation are originally, like their prototypes, of good silver. Later specimens often show more or less of alloy; and some, like the present, are not to be distinguished from bronze pure and simple. These sometimes, too, show traces of a thin silver plating, and it is not improbable that they were all originally plated and intended, as is the case so often with Roman coins also, to pass as silver.

[UNCERTAIN.]

10. *Obv.* Head to r.

Rev. A sort of *svastika* with five curved arms within a circle, to the outside of which are attached bars, each surmounted by a crescent with horns turned inwards; border of dots.

Mr. L. White King. Æ ·65; Wt. 56. **Pl. 10.**

The attribution of this strange coin, which seems to be different from anything hitherto published, is quite doubtful. The head is not unlike the degradation of the Sassanian head on the coins of the *Gadhiya-paisā* class.[1] At the same time it seems to resemble the head on some of the Hūṇa coins.[2] Its resemblance to heads found on coins of both these classes is not to be wondered at in view of their common derivation from a Sassanian source. Its resemblance to a head of any description has, however, not always been recognised. It was at first described as an "elephant walking to right," and compared with the coin published by Cunningham (*Coins of Ancient India*, pl. x, 21); and, if the coin be held sideways, its likeness to this description will be seen to be very curiously true.

Nothing quite like the symbol which forms the reverse-type seems to occur on any other Indian coins; but symbols somewhat similarly formed with circles having various external attachments are not uncommon on the punch-marked coins.

[UNCERTAIN]: ? KIDĀRA KUṢANA (*Indian Coins*, § 76).

11. *Obv.* Male bust, full-face, wearing head-dress, with long streamers rising up from the shoulders. In margin, traces of inscription or ornamented border.

Rev. Inscription of two lines in Brāhmī characters struck over some type, or possibly another inscription, with ornamented border.

Electrotype in B.M. Æ ·55. **Pl. 11.**

[1] *E.g.*, Cunningham, *C.M.I.*, pl. vi, 7.

[2] *Cf.* Cunningham, *Later Indo-Scythians* (*Ephthalites or White Huns*), Num. Chron., 1894, pl. x, particularly, perhaps, fig. 3, a silver coin of Mihirakula.

Perhaps the nearest analogy to this coin is presented by the coins of *Kṣatrapa Tarīka*, published by General Sir A. Cunningham in *Num. Chron.*, 1893, p. 201, pl. xv, 8, 9. It is, indeed, not impossible that this coin may bear on its reverse the same inscription with the letters much confused owing to the double striking. The *akṣara pa* seems to appear clearly where we should expect it, at the end of the first line of the inscription, and *ra*, perhaps with its vowel-mark erased, where we should expect *rī*, in the middle of the second line. The other *akṣaras* are all more or less confused—indeed, the first and second of the first line admit of being more easily read (as *ma-rmi*) if the coin be inverted and they be taken to be the second and third of the second line. That this cannot be the correct position seems, however, to be shown by the *akṣara pa*, which appears to be quite clear and not to admit of any intelligible reading if inverted. But, quite apart from the inscription, the bust on the obverse offers the most striking resemblance to some of those which appear on coins of the Kidāra Kuṣanas, and, particularly, on one class of the coins of *Kṣatrapa Tarīka*. This resemblance, shown in such points as the facing position of the bust, the streamers flying upwards from the shoulders, the head-dress and the ear-rings, will be apparent if our coin be compared with several of those (Nos. 1, 2, 5–8) illustrated in the plate of Cunningham referred to above.

? Nanda Kings of Kārwār: Mahārathi S—.

12. *Obv.* Humped bull to l., [सव?]लय महारथि (?ठि)स स[—
= [*Sava*?]*laya Mahārathi* (?*ṭhi*)*sa Sa*[—.
Rev. l., tree within railing; r., Caitya surmounted by crescent.
Mr. R. Sewell. Lead, 1·05; Wt. 211·5. **Pl. 12.**

The reverse-type of this coin connects it with those published first by Elliot[1] and subsequently by Cunningham.[2]

[1] *Coins of Southern India*, p. 31, pl. ii, 41, 42.
[2] *Coins of Ancient India*, p. 111.

These were acquired by General Pearse at Kārwār (North Kanara, Bombay Presidency); and, as they seem to bear names ending in -nanda,[1] they are at present usually described as coins of the 'Nanda kings of Kārwār.' This title, however, must be regarded as purely tentative. It may serve as a convenient designation only until a more accurate description is possible. There seems to be no other evidence of the existence of such a dynasty; and, at first sight, the evidence of the present coin would seem to indicate that it, and, presumably, the very similar coins discovered by General Pearse, were struck by a dynasty the members of which called themselves 'Lords of Mahārāṣṭra.'

Such, at first sight, would seem to be indicated by the designation 'Mahārathi' or 'Mahāraṭhi.' But, on further examination, it will be seen that the precise meaning of the word must remain, for the present, somewhat doubtful. It occurs frequently in inscriptions, but this is the first instance in which its occurrence on a coin has been noticed; and, as we may assume that only rulers struck coins, this additional piece of evidence must have very considerable weight in any attempt to determine the status of the 'Mahārathi.'

The evidence from inscriptions (Bühler, in *Arch. Surv. West. Ind.*, vols. iv and v) is as follows:—

(1) Nānāghāṭ (vol. v, p. 60, pl. li, 1): . . . *laya mahāraṭhino Aṁgiya-kula-vadhanasa.*

Dr. Bühler restored the first word as *bālāya.* He remarks that, on the photograph, "the letter *-la-* is faintly, but still distinctly, readable before *-ya*" (p. 60, note 3); but there seems to be no evidence whatever for the *bā-*, although,

[1] Cunningham read the name as (1) *Mula-*, or *Mudra-nanda*, and (2) *Vadala-nanda* respectively. He gives the legend of No. 1 as *Rājña Mudra-nandasa.* It should probably be corrected to *Raño Muḷana(ṃ)dasa.* About the cerebral *ḷ* in the second *akṣara* of the name there seems to be no doubt, but its vowel may perhaps be *i* or *ī*. The legend of No. 2 may, perhaps, be *Raño Vaṭu[ga]na(ṃ)dasa.* The third *akṣara* of the name is quite doubtful, but it seems to be one which opens at the bottom—*ga*, *ta*, or *bha*. The name may, perhaps, be the Sanskrit *Vaṭuka*, a name of Śiva (see the quotations from Purāṇas given in the *Śabda-kalpadruma*, *s.v.*).

of course, the conjectural restoration *bālāya* is, in itself, extremely plausible. The evidence of the coin, however, on which the same two syllables *-laya* precede the title *mahārathi*, is rather against this. The restoration *bālāya* on the coin is improbable. If it were struck by a queen styling herself 'daughter of the Mahārathi,' as Bühler interprets this passage in the inscription, we should certainly expect, in accordance with the general usage, *Mahārathi-bālāya*. On the whole it seems more probable that *-laya*, both on the inscription and on the coin, is what remains of some name—perhaps of a people or of a place—specialising the title 'Mahārathi.'

With the abandonment of Bühler's restoration would cease his objection to the identification of the *Mahārathi* with the *Dakhi*[*nāpa*]*ṭha*[*patino*] mentioned in the previous line of the inscription. The whole inscription is far too fragmentary to admit of any proof of this identification; but its possibility should be borne in mind.

Unfortunately, no certain information can at present be obtained from the Mahārathi's title *Aṃgiya-kula-vadhana*. Bhagvānlāl's suggested correction *Andhriya*, tempting as it seems, is quite impossible (Bühler, *id.*, p. 66). Can *Aṃgiya* = *Aṅgika* refer to the Aṅgas, who are placed by Varāhamihira together with the Andhras in the south-eastern district?[1]

(2) Nānāghāṭ (vol. v, p. 64, pl. li, No. 6): *Mahāraṭhi* [*Tra*]*nakayiro*.

This is the inscription of one of the relievos in the cave. The *tra* is not certain; but, in any case, it seems impossible to read the *akṣara* as *ga*, and to translate with Professor Bhandarkar (*Hist. Dek.*, p. 15, second edition), "the heroic Marāṭhā leader or the hero of the Marāṭhā tribe." But although the name is not certain, this inscription is most important, for, taken together with the inscriptions of the other relievos, it shows the 'Mahāraṭhi' in the company of two kings, one queen, and three princes, and,

[1] *Cf.* Fleet, *Topographical List of the Bṛhat-Saṃhitā*, Ind. Ant., 1893, pp. 171, 173, 179.

apparently, in order of precedence, after one of the princes and before the other two (Bühler, *id.*, p. 66).

(3) Kanheri, No. 29 (vol. v, p. 86): *Mahārā[ja]bālikāya Ma[hābhoji]ya bā[likā]ya Mahāraṭhiṇiya Khaṃdanāgasātaka-mātuya.*

(4) Bhājā, No. 7 (vol. iv, p. 83, pl. xliv): *Mahārathisa Kosikīputasa Viṇhudatasa.*

(5) Beḍsā, No. 3 (*id.*, p. 90, pl. xlvii): *Mahābhoyabālikāya Ma[hā]deviya Mahāraṭhiniya Sāmaḍinikāya.*

(6) Karle, No. 2 (*id.*, p. 90, pl. xlvii): *Mahāraṭhisa Goti-putrasa Agimitraṇakasa.*

(7) Karle, No. 20, dated in the seventh year of the Andhra king Vāsiṭhīputa Sāmisiri-[Puḷumāyi] (*id.*, p. 107, pl. liv): *Okhaḷakiyānaṃ Mahārathi (? ṭhi)sa Kosikīputasa Mitadevasa putena [Ma]hārathinā Vāsiṭhiputena Somadevena.*

These inscriptions show the 'Mahārathi' and his wife the 'Mahārathinī' in the most intimate association with royal titles. That the Mahārathis were feudatory to the Andhras is, as Bühler pointed out, shown by inscr. (7), which is dated in the regnal year of an Andhra king. That they were further closely connected with the Andhra kings by family or by caste seems to be shown, as Paṇḍit Bhagvānlāl observed, by the use of metronymics which they have in common with them. That their general title was sometimes further defined by the name of the people or of the country over which they ruled is clear from inscr. (7), and probably also, as we have seen above, from inscr. (1) and from the coin. Lastly, the fact that they struck coins seems to show that they were occasionally, at any rate, sufficiently powerful to assert a certain degree of independence.

Dr. Bühler explained the title as perhaps originally the same as the Sanskrit *mahāratha*, 'a great warrior,' and Paṇḍit Bhagvānlāl, in his note on Bhājā Inscr., No. 7,[1] states that it is "a Pauraṇik title of a great warrior: it is

[1] No. 2, in *Cave-Temple Inscriptions*, p. 24.

common in the families of Rājas." The dictionaries seem not to know of *mahārathi* in this sense, but *mahāratha*, of which it may be an equivalent, is of course quite common.

Professor Bhandarkar, on the other hand, holds that it is "clearly . . . . the name of a tribe, and the same as our modern Marāṭhā."[1] His objection to Paṇḍit Bhagvānlāl's view is founded on the occurrence of the feminine form *mahāraṭhinī*, which, he holds, could not properly be used to denote 'the wife or daughter of a great warrior.' But this objection seems to be scarcely valid. Surely *duchess*, for instance, means 'the wife of a duke,' and not 'a feminine leader.'

But, whatever the derivation of the term may have been, such an expression as *Okhaḷakiyānaṃ Mahārathi* (inscr. No. 7) shows conclusively that it denoted the governor over a part of the kingdom.

Unfortunately, a great portion of the inscription on our coin cannot be read with any certainty. If read from the bottom left, traces of what is apparently a *sa* are first seen, followed by what may be traces of a *va*, a *ḍha*, or simply some symbol in front of the bull. After the legible portion which follows (*-la-ya-ma-hā-ra-thi* (*ṭhi*)*-sa-s*[*a*]) there may have been several *akṣaras*, but no adequate traces of them remain.

It is scarcely safe, therefore, to attempt to extract any further information from the inscription on the coin; but, as has been already observed, its reverse-type seems to show that it is connected with a class of coins already known. The form of the 'tree within railing,' which is the chief feature of the reverse-type, is strikingly similar to that which occupies the same position on the 'Nanda' coins—very nearly approximating to that of Vaṭu[ga]nanda, and somewhat farther removed from that of Muḷananda. All three reverse-types are, however, distinguished from one another by the symbol or symbols which appear to the right of the main type. These subsidiary symbols may,

[1] *Hist. Dek.*, p. 12, note 2.

perhaps, be characteristic of the individual ruler; or they may, on the other hand, denote historical facts such as victories won or territories annexed. Their precise meaning must, for the present, remain quite doubtful. The 'Mahārathi' coin is further distinguished from the 'Nanda' coins by its obverse type. It has the 'humped bull,' while they have the 'caitya.' There is, therefore, nothing to show the precise connection which existed between the princes who struck these coins. They may have belonged to the same dynasty, or they may have been connected merely as feudatories of the Andhras.

From the epigraphic point of view, the clear, well-cut letters of the 'Mahārathi' coin would seem to be earlier than the clumsy, ill-formed letters of the 'Nanda' coins, but too much stress must not be laid on this point. The roughness of the letters may be due to local workmanship. The letters of the first are strikingly like those of the inscriptions, and they are no doubt of the same period—first or second century A.D.—a period to which also the coins of the Andhras belong. We may therefore provisionally arrange the coins of this series in chronological order as follows:—(1) Mahārathi S—; (2) Vaṭu[ga]nanda; (3) Muḷananda.

ANDHRA: ? SAKASENA (*Indian Coins*, §§ 85–88).

13. *Obv.* Lion to right; [—न ?] स[—.
Rev. Plain.

Mr. L. White King. Lead, ·95; Wt. 244. **Pl. 13.**

This coin may be compared to the one published by Elliot, *Coins of Southern India*, pl. ii, 47, pp. 23 and 152*b*, which has as its type a 'lion to left.' Both coins have the reverse plain; and on both traces of an inscription, in Brāhmī characters of the Andhra type, are to be read. Sir Walter Elliot, in his description, says "the letter *sa* alone is legible"; but, in reality, five *akṣaras* are more or less visible—*r. r. sa ra ña.* The two last, no doubt, form the

ordinary beginning of an Andhra coin-legend = *rājñaḥ*. The three first are the last part of the name or title of the king, possibly *-vīrasa*.

There are fewer traces of an inscription on Mr. King's coin, but, such as they are, they seem to be relics of a coin-legend similarly arranged. The only *akṣara* which can be read with certainty is a *-sa*, occupying the same position as the *-sa* on Sir Walter Elliot's coin, and this is preceded by traces of a letter which cannot be restored with any certainty. It may possibly be the letter which is doubtfully read as *-na-* on the coins about to be described.

These two coins also come from the same district, the Kistna District of the Madras Presidency. Mr. King's specimen is more particularly described as having been found in Guḍivāḍa, a site from which probably more Andhra coins have been acquired than from any other.

These Andhra coins, having for their obverse-type the figure of a lion turned either to the right or to the left, have been called 'Siṃha' coins by Elliot[1] and Thomas; but while the former extends the term to all coins of Southern India which bear a 'lion' for their type, the latter uses it especially of the leaden coins of the Andhras.

In the *Indian Antiquary* for 1880 (p. 61) Thomas published eleven specimens of this class belonging to Mr. Sewell, through whose kindness I have been able to make an examination of the originals. The inscription, read tentatively by Thomas as *sakasakasa* or *-sya*, seems to me, judging from the two specimens on which the most distinct traces remain, to be more probably *sakase*[*na*]*sa*. All the *akṣaras* seem to be certain except the last but one, which may be the later looped form of *na*.

If the reading of the name 'Sakasena' could be established beyond question, it might be possible to identify, as Professor Bhandarkar has already identified,[2] the striker of these coins with the Māḍharīputa Svāmi-Sakasena of the

[1] *Gleanings*, No. 1, pl. iii.
[2] *Hist. Dek.* (2nd ed.), p. 35.

Kanheri inscription.[1] So far as the name is concerned, Professor Bhandarkar's conjecture that Thomas's reading *Sakasakasa* should be corrected to *Sakasenasa* seems to me to be almost certain.

Professor Bhandarkar places this Māḍharīputa Sakasena quite late in the Andhra series (*c.* 190 A.D.).[2] This attribution seems to receive some support from the fact that the *-na-* of the name on the coin, if correctly restored, can only be a *-na-* of the later form, in which a loop or a curve took the place of the original straight line at the base. In the inscription, too, the later form seems to occur in the name, while the earlier form is seen in other words. But, if Māḍharīputa Sakasena be placed so late, it is difficult to see how he can be identified with the Māḍharīputa Sivālakura of the coins, the letters of which seem to be undoubtedly of an earlier date.[3]

Mr. Sewell's coins agree with the specimen now published, not only in type, size, and weight,[4] but also in having a plain reverse—a feature which has usually been supposed to be characteristic of early coins. Altogether, it will be seen that the precise attribution of the coins of this class cannot be determined until several difficulties have been solved.

ANDHRA: SĀTAKAṆI (*Indian Coins*, §§ 85–88).

14. *Obv.* Elephant to right; **सतकणिस** (*Satakaṇisa*).[5]
Rev. Portions of two impressions of the 'Ujjain' symbol.
Mr. L. White King. Potin, ·65; Wt. 26·5. **Pl. 14.**

15. *Obv.* Similar; **सतक** [. .] (*Sataka* . .)
Rev. Similar.
Mr. L. White King. Potin, ·65; Wt. 26. **Pl. 15.**

[1] *Ar. Sur. W. Ind.*, v, p. 79, pl. li, 14.
[2] *Hist. Dek.* (2nd ed.), p. 36.
[3] *Cf.* the forms of *ka* and *ra* not curved at the bottom.
[4] 218 to 250 grs.
[5] The first *akṣara* appears sometimes as *sa-* and sometimes as *sā-*.

These coins are not new to numismatics; but they are published here chiefly on account of the excellent inscription of the former and of the well-preserved obverse-types of both. A similar coin seems to be described, but not illustrated, by Thomas in Elliot, *Coins of Southern India*, p. 33, No. 10; and among the Andhra coins from Guḍivāḍa published by Mr. Rea in his *South Indian Buddhist Antiquities* there is at least one (pls. xii and xiii, No. 55) which seems to be of the same kind.[1] The former is, indeed, called 'copper or bronze' and the latter 'lead'; but it is not improbable that they may both, like the two coins here published, be composed of the alloy which, for want of a better name, is here called 'potin,'[2] and which, according to the varying proportions of its ingredients, appears sometimes rather like bronze and sometimes rather like lead.

The most important find of coins of this particular class was made in the Brahmapuri Tahsil of the Chanda District (Central Provinces) and fully described by Dr. Hoernlé in the *Proceedings* of the Bengal Asiatic Society for 1893, p. 117; and a valuable selection from this find was presented by the Society to the British Museum in the same year.

Dr. Hoernlé attributes those coins with inscr. *Siri-Sātakaṇi* or *Sātakaṇisa* (without *Siri-*) to Gotamīputa Sātakaṇi I (*c.* A.D. 113, according to Mr. Vincent Smith), and those with inscr. * *ta Siri - Yaña - Sātakaṇi* to Gotamīputa Sātakaṇi II (*c.* A.D. 184, according to Mr. Vincent Smith). He notes that the first letter of the last inscr., here denoted by an asterisk, is uncertain; but it seems to me, judging from one of the Chanda coins (B.M.; As. Soc. Beng., 93: 9–6: 5), that both this sign and the following one, which

[1] *Arch. Surv. South. Ind.*, vi = *Arch. Surv. Ind.* (New Imperial Series), xv.

[2] Babelon, *Traité des monnaies grecques et romaines*, tome i, p. 371: "En numismatique, le potin est au bronze ce que le billon est à l'argent; c'est un métal impur, composé de cuivre jaune et rouge, d'étain, de plomb et de lavures ou scories diverses." It is probably to these and similar coins that Elliot refers when he says (*C.S.I.*, p. 22), "One class of coins was found to consist of a kind of speculum of an alloy of lead and tin, and another of an impure lead ore, which gave them the appearance of a coarse alloy."

he reads as *-ta*, may possibly only be parts of some symbol, perhaps a conch-shell. It is probable also that the genitive *Sātakaṇisa* is the form invariably intended whenever the name appears on these coins, although there is very often no room for the termination *-sa*.

Mr. Vincent Smith, who most kindly allowed me to have the advantage of studying the manuscript of his article on the chronology and numismatics of the Andhra Dynasty, which has recently appeared in the *Zeitschrift der Deutschen Morgenländischen Gesellschaft*, attributes both of these classes of coins to Gotamīputa Sātakaṇi II. The numismatic evidence, whatever it may be worth in this particular instance, certainly seems to be in favour of Mr. Vincent Smith's attribution, for the coins of the two classes are most closely connected by community of types and by the similarity of their inscriptions.

Together with these coins in the Chanda hoard were found a number of coins of Puḷumāvi, and also a number of specimens which could only be described generally as 'coins with imperfect legends.' All of these have the same types, and all are of the same peculiar metal. There can be no doubt that all the coins thus found together—and there would seem to be no reason for not accepting the statement that they were all found together—must belong to the same period; and the evidence to be obtained from this Chanda hoard should have considerable weight in any attempt to determine the chronology of this portion of the Andhra Dynasty.

Dr. Hoernlé gives the inscription on the coins of Puḷumāvi as *(Si)va-Siri-Puḍumāvisa*. The initial *Si-* of *(Si)va* he regards as uncertain, and states that the second *akṣara* of the name, which he reads as *Puḍumāvi*, may, perhaps, be *-ḷu-*. The whole inscription, unfortunately, is not legible on any specimen in the British Museum. It would be interesting if the reading of the first portion *(Si)va* could be substantiated, as the name *Siva-śrī* is actually found in the lists of Andhra kings given by the Purāṇas,[1] though not in

[1] Bhandarkar: *Early History of the Dekkan* (2nd ed.), p. 32.

connection with Puḷumāvi. One cannot, however, altogether neglect the possibility that the traces read by Dr. Hoernlé as *(Si)va* may, as was suggested above in regard to his reading **ta* on coins of *Siri-Yaña-Sātakaṇi*, perhaps, only be the traces of some symbol.

Two of the Chanda coins in the British Museum (As. Soc. Beng., 93: 9–6: 7 and 17) show without doubt that the second *akṣara* in the name *Puḷumāvi* is *ḷu* and not *ḍu*.

Among the 'coins with imperfect legends' found at Chanda, there is one class of very considerable importance. Dr. Hoernlé gives the legible inscriptions as *Siri-Kaṇu-Sāta-* and *ri-Kaṇu-Sāta-*. The coin having the last-mentioned is, probably, the one now in the British Museum (As. Soc. Beng., 93: 9–6: 19). I have examined it, and I cannot doubt that the inscription should be read as *-ri-Kaṇha-Sāta-*. The *akṣara ṇha* seems to me to be almost exactly like the form given by Bühler, *Indische Palaeographie*, pl. iii, xiii, 40. A Kaṇha (or Kṛṣṇa) of the Andhra Dynasty is, of course, well known, both from the Purāṇic lists and from an inscription.[1] But in the lists he appears as the second member of the dynasty, and the characters of his inscription are undoubtedly early. Bühler assigned them to the first half of the second century B.C., and there is a consensus of opinion that this inscription must be much older than the other inscriptions of the Andhras.[2] The Kaṇha of the coins cannot by any possibility be identified with the Kaṇha (Kṛṣṇa) of the Purāṇic lists and of the inscription. The coins are closely related in every way to the others found at Chanda, and may, like them, be assigned, with a fair degree of confidence, to the second century A.D. We must, therefore, place in the list of Andhra kings a second Kaṇha, who was not widely separated in point of date from Vasiṭhīputa Siri-Puḷumāvi and Gotamīputa Siri-Yaña-Sātakaṇi.

One feature, shown by the two coins belonging to Mr. L. White King, which are described above (p. 303) and

[1] *Arch. Surv. West. India*, iv, p. 98, pl. li, Naṣik No. 1.
[2] *Arch. Surv. W. Ind.*, v, p. 73.

illustrated in the Plate (Nos. 14 and 15), remains to be noticed. The reverses of both show portions only of two impressions of the 'Ujjain' symbol. It seems impossible to explain this irregularity otherwise than by supposing that the Andhra coins of this peculiar metal were cast and not struck, and that, in the process of casting a number of these coins at the same time, the reverse section of the mould must have been incorrectly adjusted to the obverse section. That the Andhra coins of this metal were actually cast, and not struck, seems to be abundantly proved by an examination of the Chanda coins in the British Museum.

? KOSAMBI: SIṂHA (*Indian Coins*, § 49).

16. *Obv.* Type indistinct; it includes a tree within railing; inscr. in Brāhmī characters across the centre of the coin, सहस (*Siṃhasa* or *Sīhasa*).

Rev. Tree within railing; l., '*Triratna*' symbol; r., uncertain symbol.

Mr. L. White King. Æ ·7; Wt. 74. **Pl. 16.**

Very little can be said about this coin, which seems at present to be the only known representative of its class. On the envelope in which it was sent to me by Mr. White King the inscription was given as *Śoḍāsa*, and the coin itself was compared with the coin of Balabhūti published by Cunningham, *Coins of Ancient India*, p. 87, pl. viii, 9 (Mathura). There can, however, be little doubt, I think, that the inscription is intended for *Siṃhasa* or *Sīhasa*. Each letter is clear, but no certain traces remain of the *-iṃ-* or the *-ī-* which was probably originally attached to the first.

The coin certainly resembles the specimen of Balabhūti mentioned above, in so far as the reverse-type, 'tree within railing,' is characteristic of both; but this characteristic is shared also by certain coins which Cunningham gives to

Kosambi,[1] and with these last our coin has so many features in common that I think we may venture provisionally to place it in the same class.

The symbol to the left of the 'tree within railing' on the reverse occupies the same position on certain of the coins of Kosambi, e.g., Bahasatimita[2] (B.M.; Eden, 53: 3–1: 229), Jethamita (Cunningham, *C.A.I.*, pl. v, 16). It is, unfortunately, not possible to recognise the symbol to the right. It may, of course, have been the 'snake' symbol which is often found in this position on coins of Kosambi, e.g., Bahasatimita (B.M.; Lady Clive Bayley, 89: 8–8: 7), Aśvaghoṣa (Cunningham, *C.A.I.*, pl. v, 14).

The coin appears to be cast, as are all the early, and perhaps some of the later, coins of Kosambi;[3] but its most striking peculiarity is that its inscription is written right across the obverse, with apparently some symbols both above and below. This is an unusual method of arrangement, but it seems to be adopted also on one of the Kosambi coins—Jethamita (C., *C.A.I.*, pl. v, 17).

[UNCERTAIN.]

17. *Obv.* Head to r., within circle of dots.
Rev. l., within rectangle, four beetles (?); r., two 'Taurine' symbols, and an elephant to r.; the rest indistinct.

Mr. L. White King. Æ□ ·65; Wt. 53·5. Pl. 17.

[1] Balabhūti is included by Cunningham among the princes of Mathura, probably because his coins were found there; but they more nearly resemble the coins of Kosambi.

[2] It may be noticed that this symbol appears as a counter-mark on certain coins of Bahasatimita, *e.g.*, Cunningham, *C.A.I.*, pl. v, 12. Unfortunately, it is not possible to determine from the specimens in the British Museum whether this counter-mark is found on coins which already have the symbol in their reverse-type, or whether it is always a real addition to the symbols originally represented on the coin. If the latter could be shown to be the case we should have another piece of evidence in support of the theory that these symbols on Indian coins have a very real historical significance. For this question *v.* Tufnell, *Hints to Coin-Collectors in S. India*, p. 10, and Rapson, *Indian Coins*, § 124; also *J.R.A.S.*, 1900, p. 101, where another counter-mark on coins of Bahasatimita is described.

[3] It is not always easy to determine whether an Indian coin is cast or struck; *v. J.R.A.S.*, 1900, p. 109.

This curious coin, which was given to Mr. White King by Captain Campbell Tufnell, is said to have been found on the Malabar coast. It is, in every respect, a most remarkable specimen, and nothing like it seems to have been published.

No other known coin of Southern India has for its type a head; and on no other known coin are the curious animals or insects, here doubtfully called 'beetles,' represented; although fishes, either enclosed, as here, in a rectangular figure, or in a wavy double line, occur frequently enough on the punch-marked coins and the coins of Uddehika, Ujjain, and Eran.[1] The elephant is, of course, a very common figure on the punch-marked coins.

Almost all that can be said about this coin is that, like the coins of Uddehika and Eran referred to above, it belongs to that stage in the development of the native Indian method of coinage in which symbols, previously stamped on the coin by different punches, are collected together into one type. This is characteristic of those parts of India in which a native coinage was developed without much disturbance from foreign influence.

The inscriptions on the coins of Uddehika show that they date from about the third century B.C. Our coin may, perhaps, be assigned to the same period.

PĀṆḌYA (*Indian Coins*, § 124).

18. *Obv.* Humped bull reclining to r. with head averted; r., *lingam* and *yoni*; above r., uncertain object or symbol.

Rev. Sacrificial lamp; on either side of it, a fish.

Æ ·8. **Pl. 18.**

The plaster casts here photographed were taken from a coin brought by a visitor to the British Museum some years ago. A similar specimen was published by the

[1] *J.R.A.S.*, 1900, p. 98, Pl. 1; Cunningham, *C.A.I.*, p. 97, pl. x, 9, 15; p. 101, pl. xi, *passim*.

Rev. J. E. Tracy in the *Madras Journal of Literature and Science* (1887–8), and illustrated in his plate (fig. 10). The type seems to be of great rarity, and is not represented in the collection of the British Museum.

The great landmark in the history of Pāṇḍyan numismatics is the introduction of the 'Cola,' sometimes called the 'Ceylon' type, which is supposed to be due to the Cola conquest in about the middle of the eleventh century A.D.[1] The coins which have the Pāṇḍyan emblem,[2] a fish, as a prominent part of their reverse-type, belong to a preceding period beginning possibly about the seventh century A.D.; but at present there is no means of determining the earlier limit of this period.

The coin now published may be compared with Mr. Tracy's coin No. 2, which has a somewhat similar reverse—an object like a crozier with a fish on either side.[3] Mr. Tracy, comparing the Tamil characters of the inscription[4] on the obverse of this last-mentioned coin with those given in pl. xviii of Burnell's *South Indian Palæography*, assigns it to the eleventh century A.D.; while, on more general grounds, he comes to the conclusion that his coin No. 10, of the types here published, must probably belong to a period "perhaps a century earlier than the Singalese invasion."[5] This

[1] Amidst all the difficulties of South Indian chronology, it is impossible to be very precise as to the date of this change in the Pāṇḍyan coinage, or of the 'conquest' which is supposed to have produced it. Provisionally, it may be held that the prototype of all South Indian coins, Cola, Pāṇḍyan, or Singhalese, which have for their types the "rude human figure, standing on the obverse, and seated on the reverse," are those with the inscription *Śrī-Rājarāja*, and that this is the Cola monarch who appears in the list quoted by Elliot (p. 135) from an article by Dr. Burgess in the *Indian Antiquary* (vol. xiii, p. 58) as Rājarāja II or Narendra Cola, A.D. 1022–1063. But a glance at Professor Kielhorn's article on *Dates of Chola Kings* (*Ep. Ind.*, iv, p. 216), or the dynastic list given by Dr. Hultzsch (*Ar. Sur. S. Ind.*, iii, p. 112; also Mrs. Rickmers, *Chronology of India*, p. 283), will show how very uncertain the chronology of the period is at present.

[2] Cf. Hultzsch, *Ep. Ind.*, iii, p. 8.

[3] This design is given by Burnell, *South Indian Palæography*, pl. xxxiii (p. 106), as that of a Pāṇḍyan seal, dated *c.* 1600 A.D.; but it is far more probable that it is of the same date as the coin.

[4] *Kothanda Rāman*, a name not hitherto identified.

[5] Mr. Tracy holds that the coins of Ceylon were the prototypes and those of Southern India the copies. The view more generally held is that expressed above in note 1; *v.* Rhys Davids, *Ancient Coins and Measures of Ceylon*, pp. 31, 32.

Singalese invasion took place in the reign of Parākrama Bāhu, A.D. 1153–1186. He would therefore assign our coin to about the middle of the eleventh century A.D.; and such evidence as there is seems to support this view.

PALLAVA (*Indian Coins*, § 128).

19. *Obv.* Lion to r., with a fore-paw upraised.
Rev. Flower-pot; on either side a staff (?); border of dots.
Mr. R. Sewell. Æ ·8; Wt. 74·5. **Pl. 19.**

The types of this coin are precisely those of the coins assigned by Elliot to the Pallava Dynasty,[1] but the present specimen differs very considerably, as regards both fabric and metal, from any described by him.

The summary of Pallava numismatics given in *Indian Coins*, § 128, requires correction in two respects. The later class (2) is stated to be of gold and silver. It was assumed that all the coins which appear to be of bronze were, in reality, only of silver very much debased. The fact is that in this class, as in so many other classes of Indian coins, almost every possible stage of degradation from pure silver downwards can be recognised; but on the whole it seems more probable that some of the Pallava coins, some of the smaller specimens especially, were really intended to be of bronze or some alloy of bronze, and are not merely very greatly debased representatives of silver.

An important piece of evidence bearing on the question of the date of these Pallava coins was, moreover, overlooked. This is afforded by the coins of '*Viṣamasiddhi*,' the Eastern Calukya king, Viṣṇuvardhana II, A.D. 663–672, published by Dr. Hultzsch in *Ind. Ant.*, 1896, p. 322, No. 34.[2] The resemblance between the two classes is so striking[3] that,

[1] *Coins of S. Ind.*, p. 35, pl. i, 31–38; ii, 49–58.
[2] The reference in *Indian Coins* should be corrected. The coin is described by Dr. Hultzsch, but not illustrated in his plate.
[3] They are of the same metal—copper or some alloy of copper. They have types of similar character; and the 'rayed margin' is characteristic of both classes.

not only must they belong to the same period, but the question arises whether or not the whole class hitherto assigned to the Pallavas may not have to be transferred to the Eastern Calukyas.

In any case, the coin now published seems to belong to the class at present attributed to the Pallavas; but there is no evidence to show whether it is earlier or later than those already published by Elliot.

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INDIAN COINS. V.

ART. X.—*The Vision of Haoma to Zaraθuštra*, being the Pahlavi text of Yasna IX, 1–48, as for the first time critically[1] translated. By Professor LAWRENCE MILLS.

The Apparition.

AT the hāvan ratu[2] (the hāvan prayer-time) [the hāvan gāh[3]] Haoma came to Zartūšt (Zaraθuštra) (2) when he was cleaning[4] around the fire, when he wished to wash the fire-place[5] and when he was intoning[6] the Gāθas [when he uttered the ašem vōhu which is thrice[7] said, and which is before the fravarānih (? i.e. the fravarāne[8])].

[1] Translations not closely critical with unedited texts, in Parsi-Persian, Sanskrit, and Gujrati, have alone preceded this. The texts upon which this translation is made were published in this Journal, at the date of July, 1900. They were edited with the collation of all the MSS. and with their variants given. The somewhat antiquated transliteration of Haug's glossaries was adhered to for certain practical reasons. For my more advanced transliteration see the *Zeitschrift* of the German Oriental Society for October, 1902. I, however, do not regard it as a critical procedure to reduce the words of Semitic origin to their complete Chaldee and other Semitic forms. The passages within square brackets, [ ], are the glosses; those within parentheses, ( ), are my explanations.

[2] The hāvani-ratu from 6 to 10 a.m.

[3] See note 5.

[4] Lit. 'in his cleaning.' I cannot accede to this homely rendering just here, with Nēryosangh and Haug; I regard the original word as meaning 'consecrating'; see SBE. xxxi, p. 231, 'served and sanctified,' two words to express my idea.

[5] Notice the close proximity of the two identical forms gās, with yet totally different meanings, one from gāθa and the other from gātu.

[6] Lit. 'in his making heard the Gāθas.'

[7] 'Which is three-said.'

[8] We should have naturally rendered: 'the III ašem vōhu's which have the fravarāne before them'; but see Nēr.'s yat phraŋarāne prāk. In our present texts some ašem vōhu's occur *before* the fravarāne, and not the fravarāne before them. The fravarāne is especially mentioned because it would be naturally associated with any special mention of the ašem vōhu. We remember that it was with the ahuna vairya that Zaraθuštra (= Zarathushtra) repelled the demons after his temptation, so the ašem vōhu, thrice repeated, followed by the fravarāne, Yasna XII (XIII), an especial confession of faith, would equal one ahuna vairya. Aside from the reasons given, I should render as indicated above in my alternative.

Zaraθuštra's Questions.

(3) Thereupon Zartūšt (Zaraθuštra) asked of him, "What man art thou?" [That[1] is,[1] he, Hōm, was not before visible in former[2] (recitations of the) Yašts.[2] Also he (Zartūšt) knew (by asking this question) that (it was) Hōm (who) met him; (and) when he (Hōm) approached him he desired (i.e. he became desirous) to[3] question[3] (him, for)[4] Zartūšt is devoted to the good Miθra,[4] (Miθra being the God of faithful and friendly intercourse). That was clear (viz. that the way to the questioning was open on both sides); that is to say, it was known to him, Zartūšt, from this[5] (text 'mitrōk xūp aīt zartūšt'), what that time (was) when he (Hōm) had been with the more (with the greater part)[5] of the Yazats (seeing that he was devoted to Miθra), also that to him (Hōm) the Yazats had been more known on account of this (text 'Mitrōk xūp aīt Z.'). So also he learned this fargart (which contained that citation) by heart. So also (encouraged by that text) he spoke up[6] with Hōm as to what he wished.[6] Some say this; that the meaning is that Aūharmazd[7] had spoken (to Zartūšt (?) through Hōm; or by means of the piece cited). So the two came together; and when Hōm had come Zartūšt recognises(-sed) him as (being indeed himself who had) arrived.]

(4) Who art thou who of all the corporeal world art seen

[1] So I render havat here, 'the meaning is.'

[2] Lit. 'in the first Yašt.'

[3] So Nēr., and I think so better than 'he asked the desired thing,' or 'what he wanted.'

[4] Lit. 'holding-Miθra-as-good-is-Z.' 'Miθra-good-is-Z.,' so I prefer. Otherwise 'the good one of Miθra is Z.' The words are a citation from some unknown piece. Nēryosangh reproduces what must be another portion of it, 'Mit'rō* zayāt zarat'ustrem,' 'let Miθra bring forth Z.,' the idea being that Z. was (figuratively speaking) a progeny of Miθra, and was therefore the more adapted to the present sacred conference or interview.

[5] Or 'in accordance with this which was known,' viz. that a time was when he had been with the 'greater immortals.'

[6] That is to say, having memorised the text from which the citation was made, he was inspired by it to question Hōm.

[7] Possibly, not probably: 'Some say that the meaning is, he had said "Aūharmazd"' (that is, that the author of the piece cited had especially mentioned 'Aūharmazd').

by me as the best?; for thine own life has been made good[1] by thee and immortal. [(The meaning) is that the life of the body has been made immortal through piety; and not like those who gnawed the flesh of Yim.[2] So also for them (i.e. for such persons) the life in the body has been made immortal until apart from the body each separate person has become immortal.]

Hōm's Answer.

(5) Then Hōm the holy, having death-afar, answered me. [His death-afar-ness is this, that he holds death afar from the souls of men.[3] Rūšan[4] said that this is the meaning; namely, that immortality is gained through (drinking the) Hōm.]

(6) I am Hōm, O Zartūšt, Hōm the holy and the death-afar.

(7) Desire[5] after me, and prepare me for the drinking, [i.e. for the purpose of (sacrificial) drinking].

(8) Render praise to me in [thy] praising in the Yasna offering so as that[6] later[6] also the Saošyañts (may)[7] praise me; [for[8] this[8] (art) thou; and (this follows) in consequence of thee].

Zartūšt.

(9) Thereupon said Zartūšt to him: "To Hōm be the praise."

[1] The translator errs as elsewhere, see Y. XIX, in regard to xvanvatō, which he seems to have understood as hū+aŋhu- (*sic*); from this his nēvak, Nēr. sundara-.

[2] Referring to the familiar myth also alluded to in the Gāθas, Y. 32, 8. The Gāθas never originally *make* myth; but they naturally allude to this long-established tale. They express thought in poetical dialogue, however; see Y. 29.

[3] Notice how positive the sense 'death-afar' becomes as against the meaning 'far-lighting' from a similar word, and as some might hold from Y. 32, 14.

[4] 'A commentator.'

[5] I restore bavīhūn as of course; see Nēr.'s samīhasva, the original Zend, and then the -hūn of the others. The Parsi-Pers. does not help.

[6] I cannot regard axarič as expressing exactly the adjective. I would also modify my rendering of the original in this sense; read rather 'in order that the later Saošyañts may praise.'

[7] 'May' is necessary to make the sense. Nēr. has only kurvanti.

[8] This seems the most probable rendering.

Further Questions asked by Zartŭšt.

(10) By[1] whom, first of men, wert thou, O Hōm, prepared in the corporeal world; and to whom was that consideration (as compensation) made?,[2] [that is to say, 'that benefit?'; thus I ask until (meaning 'for the purpose that') it may be mine (also), since the benefit came to him (that is to say, to the first preparer)].

The Answer.

(11) To me he[3] spake the answer, he, Hōm, the holy and the death-afar:

(12) Vīva(n)ghān,[4] first of men, prepared me in the corporeal world. To him that consideration (as compensation) was made,[5] [i.e. (that) benefit came to him],

(13) when from him a son arose (was born) who was Yim, the brilliant[6] (and) the rich-in-flocks,

(14) who was the most glorious of born (men) [the most actively attendant to duty], the most beatific[7] (lit. 'sun-viewing'[7]) of men [i.e. he is the most handsome (lit. 'the

[1] We must, of course, render mań being in an oblique case; this on account of the havih='thou art (or 'wert') made.' Nēr. has, however, more correctly, 'kas tvāṁ . . . saṁskṛtavān.'

[2] Nēr. is more definitive than the Pahlavi or than the original text with his čakṛshe.

[3] Nēr. correctly refers valā to Hōm.

[4] Notice this certain case for the restoration of the nasal not expressed in the Pahlavi.

[5] Nēr., čakre.

[6] This calls up the question as to whether we should follow more obvious Vedic analogies and render the Zend xšaēta 'the king'; cf. the Vedic Yamá rā́jā (-jan). But as to the Pahlavi -šēt, it would seem to be the same word as the original xšaēta at the Pahlavi stage of the language. Nēr. is, indeed, valuable authority. He reproduces the entire name as Yamaçeda, but adds the gloss dīptimān='the brilliant.' If the expression xšaēta were Gāthic we should say that Yima xšaēta was a mere variant for the Yamá rā́jan (-jā) of the sister book, both arising from a common original. But some might hesitate at such a conclusion when studying the Hōm Yašt, the Vendīdād, etc., and suppose that 'brilliant' was the original sense; see, however, the unmistakable signs of identity of origin between this Haoma hymn and its sisters, the Indian Sóma Hymns. The Parsi-Persian does not decide, giving us Jamshēt in both text and translation.

[7] Hvar(e) dar(e)sō and svarḍṛç are one more proof of the close relation of this Yašt to the Sóma Hymns of the R.V. Svar-ḍṛç, I should say, could hardly be restricted to the meaning 'alive' in a literal sense, and so 'sun-seeing.' 'The

best-eyed.'[1] The meaning) is that 'his glory is his active energy'[2]; and so[3] (that glory) which is in the body of man (in general) and that which is in the body of Yim, they (those two glories) were united (and accordant in Yim. That is to say, it was corporeal beauty in his case too); that is, (it, the glory of Yim, was more: it was) active virtue (without which his personal beauty would have been defective). Rūšan has said, "The glory is this which is in the body of a glorious man, he possesses it (i.e. it is bodily presence or majesty); and his virtue (active energy) would render that bodily glory current (i.e. 'bring it out into action and into effect')"].

(15) Whereby he made herds and men immortal in his kingdom, and kept the waters and the plants from drought (i.e. literally he kept them not dried)[4] [that is to say, what he did not wish[5] to become dry, that did not become dry].

(16) And (he made) the food of the eaters imperishable,[6] [that is to say, when one kind was eaten (another) one came (in its place)].

(*only*) one living' was not meant, as Yima (unlike Yamá) was not 'the first of men' in the Avesta, and so was not even 'the only one living.' Svardṛç, as applied to Mitrá, Váruṇa, Agní, Indra, the Ṛbús, and 'all the gods' can hardly mean merely 'alive' in the literal sense of the word. It must mean 'alive' in the figurative sense, i.e. as 'alive,' 'with eyes open,' 'seeing the sun.' 'Vēñg-dar(e)-sī is used in Y. 43, 16, of 'the Kingdom,' or 'the land,' and not at all of any literally 'living being.' It must there mean 'blest by the sun.' With the words 'most glorious' in the immediate context I am the more inclined to bring the meaning of 'var(e)-dar(e)sō (IX, 14) to that of the 'vēñg-dar(e)sī of Y. 43, 16, that is to say, to regard it as meaning 'blest of the Sun,' 'on whom the beneficent Sun shines.' Nēr. has sūryanirīkšaṇatamaḥ; the Parsi-Pers. merely translates xūršēt-nigirešntar (*sic*). Avesta explains Veda here.

[1] Lit. 'having most good eyes.' Nēr. has suločanatamaḥ. The Parsi-Pers. translation nēk čašmtar = 'the best-eyed,' probably meant 'the most handsome' rather than 'the one possessing the most penetrating sight.'

[2] Some would render the word in the gloss 'most virtuous,' following Nēr.'s satkāryatamaḥ. Xvēškārtūm, lit. = 'most spontaneously active.' Satkāra, which recalls Nēr.'s peculiar form, has, however, secondary meanings, and refers at times to 'hospitality.' The Parsi-Pers. merely repeats the text in its translation.

[3] I now prefer aētūn to Nēr.'s asti = 'aīt.'

[4] I would now read the axôšk suggested in my edition; see this Journal of July, 1900. The Parsi-Pers. translator understood bī-marg, but in view of the original text and of Nēr.'s açošīṇi we should not hesitate.

[5] Possibly 'what ought not to become dry'; but Nēr. understood, 'yat ab'īpsate tan na çuškaṁ,' omitting the first la = na, which, however, is not essential.

[6] The Parsi-Pers. has bī-kāhešn = 'without diminishing.'

(17) In the reign of Yim the swift there was not cold, nor heat,

(18) no old age, nor death, nor envy demon-made [(the meaning) is, 'they have been ever (thus); they have been held back from (destructive) sin'[1]].

(19) (As if) persons of fifteen years and handsome (lit. 'of good growth') they went forth, father and son, either-one [(the meaning) is[2] 'splendid.' In the praising[3] of the son it was said that the son was as good as the father (as fit to offer praise) and the father as good as the son].

(20) Ever (all) the while when the reign of Yim, the Šēt,[4] the many-flocked, the son of Vīva(n)ghān, endured[5] [this thing was so].

Zaraθuštra.

(21) By whom, O Hōm, as the second of men in the corporeal worlds wert thou[6] prepared? What was that consideration[6] (i.e. that compensation) effected for him?

[1] Referring to the 'envy' mentioned. This 'being held back from sin' seems suspiciously refined as a religious idea for the original period, the date of the Hōm Yašt. One is strongly tempted to read 'destruction' outright, referring to the etymology of vi-nās. But a translation is not an original, and vinās generally means 'sin,' and was so understood by Nēr. When proceeding as translators of an original text, of course, we must render in a strictly realistic sense, but we are now seeking to reproduce the ideas of a later translator who seldom recoiled from the recognition of moral ideas too advanced for the original period.

[2] One might be tempted to read havend, 'they are,' for havat (so), 'they are splendid'; but havat as = '(the meaning) is' is here characteristic.

[3] One is extremely reluctant to concede our modern sense here 'in the praise of the son' to pavan stāyešn i pūsar, though 'praise' in this modern sense immediately follows. Yet we must not allow ourselves to be carried hastily away by such adaptations. I think that 'pavan stāyešn' means 'fit for worship' in the Yasna (though so young). Nēr. has a pūjāvinayakaučit for būrzak. That should mean literally 'the-two-educated-to-worship'; this without including the stāyešn, which is separately rendered by stutyā, so that in view of the context it ought to mean 'august,' 'worshipful,' 'having-people-accustomed-to-pay-homage,' 'having-people-with-homage-education' (*sic*), a bahuvrīhi. But we must not forget that we are dealing with a peculiar Sanskrit, and 'they two-being-educated-to-worship' may be Nēr.'s meaning, while stutyā might be a second reproduction of stāyešn.

[4] 'The King (?),' or 'the brilliant.'

[5] Notice the admirable freedom of this rendering for the original, 'so long as Yima might rule.'

[6] Again we have freely the passive form. I would now break away from the indication 'sanctity' for tarsakāsīh, 'ašiš,' and render the original simply 'what reward' in this place?

[that benefit?; that is, (this I ask) until (or 'in order that') it may become mine]; and what benefit came to him?

Hōm.

(22) To me he answered, he, Hōm, the holy and the death-afar:

(23) (By) the Āθviyān as the second of men in the corporeal worlds was I prepared. For him that consideration (i.e. that compensation) was made, and to him that favour came,

(24) that from him a son was born who was Ferīdūn of the armed-village.[1] [(The meaning) is, that his being the armed-tribe-one was this, that his house became great from the posterity[2] of the fathers (so offering a large percentage of armed men); and that also which Dahāk (had taken) with violence, he took back.[3]

Also this sovereignty (was kept) by him, and his relations[4] which were not found (that is, who were lost in the captivity of the Dahāk) those he possessed[5] (i.e. got back into his possession).]

(25) By whom the Dahāk Az was smitten, the three-jawed, the three-headed, the six-eyed, and thousand-jointed,[6] the lawless one by nature,

(26) the very powerful Drūj of the demons, who is most evil to the settlements, that wicked [harm-producer],

(27) who (as) the very most powerful Drūj was made by him Ganrāk Mīnavad (Angra Mainyu) against the corporeal

[1] Nēryosangh bears evidence against our applying the more usual later meaning to 'afzār' here. He seems to have had the original sūrayāo here in his eye; see his veçmaçastraḥ.

[2] So, rather than 'inherited substance'; see Nēr.'s anvayāt='descendance,' 'family,' 'race.'

[3] I do not think that the laxvār is used in the sense of 'away.' 'What Dahāk had taken "away" with violence he, Ferīdūn, took.' The Parsi bāz-avazh is not so often used in the sense of 'away.'

[4] The Parsi-Pers. has avarmānd. An alternative version of the Pahlavi might be: 'And the possessions of this one (i.e. of Dahāk) which were not disclosed (i.e. which were hid in his folds), those he got into his power.'

[5] Nēryosangh's uddad're should, of course, be taken in the sense of dāšt, either as 'he seized,' or as 'he took (?) into his possession.'

[6] This is my conjecture; Nēr. has -praṇid'im.

world(s) for the death of the worlds of Aša [that is to say, of[1] the Drūjes[1] of the world he made that one the more powerful (according to the text beginning with the words) 'kō θvām yim ahurem mazdām . . . .'[2] That[3] story is this, that every injury (perhaps 'all those injuries') which it was possible to him (to do) against the creatures of Aūharmazd, that (or 'those') he did thoroughly. (But) there was this[4] (other account of the explanation), there was (indeed) a thing which it was possible for him to do, and he did not do it].

Zartūšt.

(28) By whom, as the third one of men, O Hōm, wast thou prepared in the corporeal world, and what (was) that consideration ('as compensation,' that is, 'as reward,' which) was made for him; and what favour came to him?

Hōm.

(29) Thereupon he said to me in answer, he, Hōm, the holy and the death-afar:

(30) Srīt[5] of the Sāhmas,[6] the profit-seeker[7]; [and his srīt-ness (thirdness) was this, that he was the third son. Also his profit-seeking was this, that he knew[8] how to seek for the welfare of (the) good creatures].

[1] Of course, merely according to the letter of the grammar we should read: 'more powerful than the Drūj of the world,' but see Nēr., and read Drūj as a collective for a plural.

[2] I am not at present in a position to place these simple words, which, of course, are but the beginning of a text which would be pertinent.

[3] Or reading zakāī with Nēr.; see his apare, 'another story is this.'

[4] Reading li-denā, or again reading 'var-āōmand,' or 'varūn-āōmand' = 'and there was a desired thing' (see Nēr.'s vāñčako). 'Every injury which it was possible to him to do against the creatures of Aūharmazd, that he did thoroughly, but there was (another one) desirable (thing) which it was possible for him to do, but which he did not do.' The Parsi-Pers. MS. omits the word, or words, altogether.

[5] Or Thrīt = 'the Third.'

[6] So, perhaps, better than the 'Sāāmas.' Possibly Semites are alluded to. The Parsi-Pers. has Samān translated Sām.

[7] As to this error see note 26 of the texts.

[8] So Nēr. A (DJ.) (reading 'Xavītūnast bavīhūnastan'), otherwise 'that he wished to understand the welfare of . . . .'

(By him as) the third of men am (or 'was')[1] I prepared in the corporeal world. For him that compensation was made, and to him that favour came, (31) that[2] two[3] sons[3] were born to him. Aūrvaxš and Keresāsp.

(32) A judge was that one (the first) Aūrvaxš [that is to say, he practised equitable decision and administration of the law], and was also a regulator of the law [that is to say, he (also) established an orderly[4] law (as well as administered it)],

(33) and the other was Keresāsp, a rising (or 'a leading') youth, curly-headed,[5] and a club-fighter [that is to say, he did much with the club (was a noted club champion). The commentator Māhvindād[6] said thus: (The meaning) is that it was a custom of the Arabs; so he said that about his wearing curls.[5] Māh-gōšan-asp said that this (was) not remarkable to him, because the Turks also wear curls[5]],

(34) by whom Az, the horny (dragon) was smitten, the horse-swallower and the man-swallower, the poisonous, the green.

(35) On whom the poison was poured (or 'pushed') horse-high, the green (poison). [(The meaning) is this: (it was) that whereby (meaning 'it was a case where') it came up to the head after coming from the jaw, (as is written in the text) xšvaēpaya vaēnaya barešna,[7] 'Cast it up; let them see it on high.' (It was) that whereby ('it was a case where') it

[1] It would hardly be possible to render literally: 'me (=li) (as) the third of men in the corporeal world did he prepare (me),' for 'am' is elsewhere havam = (old) 'hōmanam.'

[2] Literally 'since' or 'for.'

[3] Notice that the dual form of the original is recognized, though it would be obvious enough.

[4] 'A law which was straightforward.'

[5] The rendering of gēsvar of course depends upon our view of the original. I am inclined to refer it to the 'woolly' head of a Negritic race. Spiegel, confirmed by Justi, regarded the word as referring to the 'lance.' This may, indeed, have been sufficient as a distinction, for the most noted Iranian weapon was 'the bow.' But recall the Vedic kapardínam, which, however, hardly refers to a Negritic origin. We have noticed that the hair and beards of the figures upon the Persian as on the Babylonian monuments are dressed in curls. The Parsi-Pers. has only a repetition of gēsvarī in text and in translation after min = æz, and for gēs after mamun (= mā) it has gadōs (?) = gūrz = 'golden mace.'

[6] So now preferring.

[7] Cf. Yašt, 19, 40.

dropped upon (the back) through the jaw. Some say to me this: (the meaning) is 'both are one' (i.e. 'both expressions refer to one thing,' the height and the length of the poison-layer).

That which was so high (as described), reaching up (to the head; see above); and what was so long fell completely (over the back).[1] Some say that (the meaning) is this, that his froth[2] stood dry on his back, (and so stood horse-high; did not flow off).][3]

(36) On whom Keresāsp cooked his meat in an iron pot,

(37) which (happened) at the noonday time.

Burnt (was) the deadly [that is to say, it became hot to him]; he reared[4]-hissing [that is to say, became two-footed (stood on two (front[5] ?) feet to hiss)].

(38) So he shot forth the iron-kettle; off the boiling[6] water went.

(39) Off in terror ran the manly-minded Keresāsp [(the meaning) is (that) his manly-mindedness was this, that he kept his heart[7] (i.e. 'his presence of mind'[7]) upon the occasion].

[1] The idea seems to be that the poison which flowed from the jaws of the Dragon lay horse-high upon his back, and this made it so deep that it came up to his head, causing the layer of poison to be as high as it was long, and soon becoming congealed and 'dry' (see below), it did not flow off.

[2] Kifr would be 'pitch' literally, or possibly some form once existed in the text nearer kaf.

[3] This 'dryness' would make the camping on the Dragon's back possible.

[4] Those who refer xvīsatča (so now) to svid = 'to sweat,' at this place, might claim that this Pahlavi word was to be so rendered; and this in spite of the explanatory gloss, which might possibly be erroneous as from a later hand. But the huge reptile would naturally rise to 'hiss.' I still think that 'hissing' is better than 'sweating' here; and so in the Vendīdād. Demons would not 'sweat (at least not) with mental misery'; the idea is too advanced for the place.

[5] That he stood erect full-length on his hinder feet would have been formidable indeed. Moreover, the accident being confined to the kettle alone would hardly have described the event. If he was merely a serpent without feet, then the 'standing' was merely a 'rearing upon the coil,' but see 'the two feet.' Nēr. has: 'dvipādo bab'uva.'

[6] We might think for a moment of xayā rātēnītak = 'ejecting the meat' (?); so reading Spiegel's text. Also of a xayā-rīzēntak (*sic*), 'shooting out the meat.' 'The body (the flesh) polluted'; also kihr tačentak (so) = 'filth-flowing' (so dividing K[5] (Spiegel's) text), would not be adapted to eatables. I can only read the Parsi-Pers. as āš-rīzēndah (so), where the āš is evidently meant for xayā; the translation āš (n.p.) 'meat' corresponds. Sp.'s Nēr. has malavatīḥ apaḥ = 'dirty waters,' which is inappropriate to cooking. Better to compare, as I did before, ašardan = 'to bake.'

[7] Nēr. has čaitanyaṁ; as we should say, 'his wits.'

Zartūšt.

(40) By whom as the fourth of men wert thou, O Hōm, prepared in the bodily worlds? What was the compensation made for him, and what favour came to him?

Hōm.

(41) Upon this he answered me, he, Hōm, the holy and the death-afar:

(42) Pūrūšasp, (as) the fourth of men, prepared me in the corporeal worlds. That compensation was made for him, and that favour came to him,

(43) that[1] thou wast born of him, O pure Zartūšt, in the house of Pūrūšasp, the demon-free, (believing) Aūhārmazd's faith. [Some (texts)[2] tell us[3] 'the demon-free' again for him (that is, 'they repeat the word').]

(44) In the celebrated Erān-vēj [where (is) the good Dāītīk[4]] by thee, O Zartūšt, the ahunaver was first pronounced [that is to say, the Yašt of my sacred[5] prayer[5] was celebrated by thee (possibly 'composed by thee')], keeping the stanzas distinctly apart [with four separated (sections of) deliveries (verse-sections?) even until (what comes) after (that is, 'even until the end')], (45) and with a firm intonation [i.e. powerfully (meaning 'with a powerful voice')].

(46) By thee, O Zartūšt, all the demons were buried within the earth (i.e. 'driven beneath the earth,' 'made to scuttle away'), (all) which before that flew over this earth

[1] Lit. 'when' or 'since.'

[2] So, better.

[3] Reading amānō, 'some say to us "demon-free" again.' 'To us' sounds too particular; yet see a similar 'am' at Y. IX, 35. Otherwise: 'some (texts) say "demon-free" for him again (is) this abode.' Nēr. has no gloss here.

[4] We might even write Dāītya, if we leave off the non-organic 'k,' reading the sign for 'ī' as 'ya,' cf. Vend., 19, 5, Sp.

[5] So the MS. B. (D., Pt. 4) comes to our rescue with vāj li? Or was this separation accidental? Otherwise we have what seems a -nāver, which might have once been a-naver, the end of the word [ahu-]-naver. This seems well adapted. Other suggested solutions might be nādī-var (see K[5], Sp.'s form) = 'voice-bearing'; 'thou first didst render it,' 'provided with a celebrant,' 'a voice-bearer.' Nāf li = 'my relation,' 'kindred' would be hardly in point. The Parsi-Pers. has nāvar (= -navar), which leads us to suppose that D.'s letters vāj li? should really be brought together, as nāvar. The Parsi-Pers. translates with the same form as if regarding the word as a proper name; recall [ahu-]-naver.

in human shape [in the body of demons. (The meaning) is (that) every one of them which was able to make his body spiritual (that is to say, 'invisible'[1] had) his body destroyed outright (and was deprived of the dangerous advantage of unseen attack from having his body made invisible). And he who was not able to do (this, i.e. to make his body invisible) was thoroughly destroyed of himself[2] (that is, his defeat cost little effort); his body (being no longer invisible) was thoroughly destroyed. This (was so) in order that from thenceforth they were not (might not be) able to do mischief in the bodily form of demons, while in the forms of beasts, and in the forms of men they are still even now[3] able to do it].[4]

(47) (This didst thou do), thou who art strong and doughty, and who art also clever and swift, who [(the meaning) is thus] art more endowed with victory[5] than the (other) creature(s) of the spirits, than the very own creature(s) of the spirits (themselves).

(48) Thereupon said Zartūšt to him: "Praise be to Hōm!"

From the above treatment one sees clearly the immense difference between this later Avesta, interesting and very valuable though it be, and the Gāthas. Here Z. is a fantastic prophet; there he is a real one.

[1] Nēr. has literally 'invisible body'; but this is, I think also here, merely his expression for 'spiritual.'

[2] The words benafšman barā šikast would most naturally mean 'self-destroyed outright.' The idea might, however, be that his entire being (soul and body) was destroyed, he being as 'visible,' much exposed.

[3] Nēr., probably misled by the shape of the Pahl. word in his MSS., has the Parsi word hañjamanāni explained as samūhāni.

[4] That is to say, they can now do mischief; but their sphere of evil influence is greatly limited. They can only act through beasts not endowed with human intellect. I render Nēryosangh thus:—"Concealing them in the earth (meaning driving them to hide in the earth), thou didst so treat all the devas, O Jarat'ustra. All who before this were able to make (for themselves) an invisible (or 'spiritual') body, those had their body shattered; those who were not able to do (so), were of themselves indeed shattered. The effect of this shattering of their bodies was that from this they were not able to do mischief through the fact that they possessed the bodies of demons. On the other hand, they made their reunions* in the bodily forms of beasts and of men (lit. 'through the corporeality of cattle and of men')." * An error for kevanič.

[5] Or 'created more victorious.'

Art. XI.—*A hitherto unrecognised Kushaṇ king.*

By J. F. Fleet, I.C.S. (Retd.), Ph.D., C.I.E.

It is a matter for some surprise, that, of the scholars who have been engaged in public in the attempt to settle the date of Kanishka, none should have noticed the existence of a member of his dynasty who ought to have been recognised at least eight years ago. The case is as follows.

At the well-known Sāñchi, in the Diwāṇgañj subdivision of the Bhōpāl State in Central India, there was found an inscription which has been edited by Dr. Bühler, with a lithograph, in the *Epigraphia Indica*, vol. ii. (1894), p. 369 f. The record refers itself to the time of a king who is described in it as *R*[*ā**]*jāt*[*i*]*rāja* and *Sh*[*ā*]*h*[*i*], with a third title, of which only the second component *putra* is extant (in the genitive case, *putrasya*), but which was quite reasonably restored as [*Dēva*]*putra* on the authority of various other records. And the name of this king was read as Vāsushka.

The record is fully dated. And, as regards part of the details, it is dated, as given in the published text, certainly in the first (month) of (the season) Hēmanta, and probably on the fifth day. The date includes also the year, which is expressed by the word *saṁ*, followed by two numerical symbols. And Dr. Bühler's text presents the year as the year 70 and 8, = 78; marking the first symbol, the 70, as damaged, by enclosing it in square brackets, but not stamping it as at all doubtful.

Thus, according to the published decipherment of it, this Sāñchi record is dated in the time of Vāsushka, in the year 78, etc. And this Vāsushka was identified with the well-known Vāsudēva, for whom we have records with dates ranging from the year 74 to the year 98.

When this Sāñchi record first came under my notice, in only a general way, I not unnaturally did not go beyond Dr. Bühler's published text of it. Last year, however, I had occasion to consider it more fully, and to examine the lithograph of it, with the following results.

First, as regards the name of the king. While the remainder of the name is clear enough, the vowel of the second syllable is not admissible as *u*. Below the *s*, there are, indeed, marks which are somewhat suggestive of a subscript *u* of the usual kind. But they do not constitute a well-defined continuous stroke, such as is the subscript *u* in *putrasya* and in the three other cases in which it occurs in this record. It is very questionable whether these marks would ever have been interpreted so definitely as forming an *u*, except for the idea, for which there was then and still is no solid basis, that the name Vāsushka might be taken as a variant of the name Vāsudēva. We can recognise a reason, which will become apparent further on in connection with another record, for deciding that these marks are part and parcel of the general damage suffered by the surface of the stone on which this record is. And, so far as it is determinable from this record, the name reduces itself to Vāsashka. There is, however, the possibility, if not an actual probability, that a superscript vowel has been damaged, and that the real name is Vāsishka or Vāseshka. But, to avoid constant repetition, we may for the present treat the name as, provisionally, Vāsashka.

Secondly, as regards the date. On turning to the lithograph, I was at once perplexed by the fact that Dr. Bühler had read the year as the year 78, when it seemed so obviously something else. But I then observed his footnote 10, on the first symbol of the year, which runs:—

"I read this sign first as 20; Sir A. Cunningham, whom "I consulted, suggested that it is a looped sign for 70. "I agree to this, as the Mathurā Inscr. No. xx. (*Epigr. Ind.*, "vol. ii, p. 214), which belongs to the same period, has a very "similar sign. (See facsimile on the plate)."

The next step then was, of course, to examine the other

record from Mathurā thus referred to, which, it may be observed, is to be found as No. 20 in *Epigr. Ind.*, vol. ii. p. 204, not 214. A lithograph of it is given in the plate at that place. Also, a photographic reproduction of it, shewing the whole of the slab on which it stands, is to be found in the same volume, in the plate opposite p. 321, where the record has been wrongly referred to as No. 21, instead of No. 20. And it must be incidentally remarked that a comparison of this lithograph with the photographic reproduction raises at once considerable doubt as to whether, in the lithographs of this series, we have actual facsimiles of the ink-impressions, or only results which have been modified by manipulation of the ink-impressions or of proofs from them. We know, of course, that by a carefully made ink-impression of an inscription there can often be brought out, quite distinctly, details which may not appear at all in a photograph; and, on the other hand, that an ink-impression may sometimes obscure details which will be quite clear in a photograph. But, in this particular case, there are too many discrepancies in shape, size, and other details of the writing, not attributable to difference of scale, between the lithograph and the photographic reproduction, for the lithograph to be the result of simply a mechanical process. And particularly noticeable is the difference in the actual type of the palatal *ś* of the syllable *śā* which stands last but two in line 1. The photographic reproduction shews distinctly that the original has there that type of the *ś* which the lithograph presents in the syllable *śrā*, No. 4 in B. or line 3, and which is discernible in also the photographic reproduction of that syllable. But the lithograph presents the other type of the *ś* in the syllable *śā* in line 1.

However, there is no doubt about the date of this Mathurā record. It is unquestionably dated in the year 70 and 9, = 79, without the mention of any king. And in it we certainly have a symbol, known long before the time when this record was edited, which is a looped form of the symbol for 70. But it is impossible to recognise any similarity

between the first symbol which we have in the Sāñchi record of the time of Vāsashka, and either the symbol for 70 which we have in this Mathurā record of the year 79, or any other symbol for 70 which can be found anywhere else, even in the table of numerals given subsequently by Dr. Bühler in his *Indische Palaeographie* (1896).

Now, let us consider what were the circumstances in which Dr. Bühler published the Sāñchi record as a record of the year 78, and treated it as giving a king's name, in respect of which he said:—"The name Vāsushka is new. But "it looks as if it were formed of the first part of Vāsudeva "and the last syllable of the names Kanishka and Huvishka, "and one feels tempted to consider it as another name of the "third Kushana king. If the first sign of the date is read, as "Sir A. Cunningham, I think, correctly proposes, as 70, the "identification of Vāsushka with Vāsudeva becomes quite "unobjectionable; for the year 78 certainly falls within "Vāsudeva's reign, and the characters of the document fully "agree with those of the inscriptions which bear his name."

Taking, in connection with those remarks, his footnote 10, quoted on p. 326 above, we see that, if Dr. Bühler had followed his own instincts, he would have brought the Sāñchi record to notice as being dated in the year 28. But, it would seem, it did not occur to him, or to General Sir Alexander Cunningham, to think of the possibility of this record bringing to light a previously unknown king. Apparently, it only occurred to them to consider that the name must be another form of a name already known, and that the date must be interpreted to suit that view. At any rate, that is the manner in which the record was actually disposed of by them. It was edited by Dr. Bühler as a record dated in the year 78, and to be placed in the time of Vāsudēva. And it has continued to be publicly treated as such, up to the present time.

Now, as has been indicated above, the first of the two numerical symbols which express the year in this Sāñchi record has suffered some damage. But it is sufficiently well preserved to be quite decipherable. And a comparison of it

with the various symbols given in Dr. Bühler's *Indische Palaeographie*, Table ix., will shew at once that it is a form of the symbol for 20, just as he of his own accord would have understood. The top part of it is somewhat damaged. But it is distinctly recognisable as a symbol for 20. And it is followed by a form of the symbol for 8,— that form which is practically the syllable *hra*,— in which the *r*-component has, whether by intention or through accident, been somewhat exceptionally prolonged up to the left. The record is, therefore, in reality dated in the year 28, in the first (month) of (the season) Hēmanta, and on probably the fifth day. It is unquestionably a record of the series to which belong the records of Kanishka, of which the latest known one is dated in the year 18, and the records of Huvishka, of which the earliest known one is dated in the year 33. And it establishes the existence of a king named Vāsashka, or Vāsishka or Vāseshka, between Kanishka and Huvishka. It may be added that we can see, now, that it is these three kings, Kanishka, Vāsashka, and Huvishka,— and not Kanishka, Huvishka, and Vāsudēva,— whose memory was so well preserved in Kashmīr that they have been mentioned by Kalhaṇa in the *Rājataraṁgiṇī*, 1, 168, as Kaṇishka, Jushka, and Hushka.

It might, however, not unreasonably be said:— But we do not know of any coins of Vāsashka; and is there any other evidence of his existence?

As regards the question of coins, it is true that we have not as yet recognised any attributable to Vāsashka. But the absence of them is of no avail against the clear evidence of the epigraphic record. We have simply now to look about for them. And we may expect to find some of them in coins, at present attributed to Huvishka, shewing more or less illegible or imperfect legends in which a lunar *sigma*, standing next before the *ēta*, has been misread as *omīcron*.

As regards the question of any other confirmatory evidence, we have, I think, not to search far for it. At any rate, we can dispose of certain supposed evidence to the contrary.

At Mathurā there was found an inscription which has been edited by Mr. Growse, with a lithograph, in the *Indian Antiquary*, vol. vi. (1877), p. 217, No. 1. It is unquestionably dated in the year 20 and 8, = 28, in the third (month) of (the season) Hēmanta, and on some day the numerical symbol for which has been broken away and lost. And it is, thus, about two months later in date than the Sāñchi record of Vāsashka of the same year.

This Mathurā record of the year 28 was stamped by Mr. Growse as a record of "probably" the time of Kanishka. It has come, however, to be always treated definitely as a record of the time of that king. And, on the last occasion of reference being made to it, it has been placed under his name with the remark:— "King's name incomplete, but "decipherable;" see opposite entry No. 21 in Mr. Vincent Smith's list of the records on p. 9 above.

But, turning to the lithograph, what do we find to be the case? Immediately before the word *rājya-sa[ṁ]vatsarē*, after which stand the symbols for the year, there stood the proper name of a king, in the genitive case as usual. Of that word, only two syllables are really extant, namely, the final ones, *shkasya*; that part of the name which stood on the same level before these two syllables has been completely broken away and lost; and, of these two syllables, the *shka* has suffered some damage, which, however, does not upset the fact that the syllable really is *shka*. At a short distance before this syllable, however, and below the level of the line, there is a clearly recognisable mark, on the broken edge of the stone, which Mr. Growse took to be the end of the tail of an *n*. And it was partly from that that he arrived at his proposed attribution of the record. He said:— "The king "commemorated was probably Kanishka; for the end of the "tail of the *n* is just visible, and other inscriptions of his "were found on the same spot."

The statement itself, that other inscriptions of Kanishka had been found on the same spot, seems to be a mistake; for, according to Mr. Vincent Smith's list, the only other records, mentioning a king's name, which have been found on the

same spot, the old jail mound, are No. 33, a record of the time of Huvishka dated in the year 47, and No. 53, a record of the time of Vāsudēva dated in the year 74. However, the point would not establish anything conclusive in any direction.

For the rest, the mark which Mr. Growse took to be the tail of an *n*, is certainly a mark which was intentionally engraved as part of a syllable of the name of which the termination *shkasya* is extant. The alphabet, however, to which the characters of the record belong, does not include any form of the dental *n*, or of the lingual *ṇ*, with a tail of which this mark can be a remnant. Nor can the mark be the bottom part of a *k* or the end of an *h* of that alphabet, or the remnant of a subscript *u*; and, in fact, there is not room enough between the character of part of which it is a remnant and the syllables *shkasya*, for the *ni* of the name Kanishka or the *vi* of the name Huvishka. On the other hand, the mark exactly resembles the bottom part of an *s*, formed exactly as were formed the two instances of *s* which we have in the word *sa*[*ṁ*]*vatsarē* in this same record; and it stands precisely where there would stand the bottom part of the *s* of a syllable *sa*, *si*, or *se*, engraved next before the syllables *shkasya*. Thus, we can say, for certain, that this Mathurā record of the year 28 is not a record of the time either of Kanishka or of Huvishka. And we can say, practically for certain, that it is another record of the time of Vāsashka, Vāsishka, or Vāseshka. It is also to be remarked that there was certainly not a subscript *u* attached to the syllable which stood immediately before the syllables *shkasya*. And we recognise in this one reason for saying that that vowel is not to be found in the name presented in the Sāñchi record of the year 28.

There is one other inscription which, also, may quite possibly be a record of the time of Vāsashka. It is the Mathurā inscription which has been edited by Dr. Bühler, with a lithograph, in *Epigr. Ind.*, vol. i. p. 385, No. 6. It is dated in the year 20 and 9, = 29, in the second (month) of (the season) Hēmanta, and on the thirtieth day. And in Mr. Vincent Smith's list it is entered under the name

of Huvishka, as No. 22, with the remark:— "King's name "incomplete, but practically certain; the associated in- "scriptions are Huviṣka's." But here, again, we are not entitled to base any conclusion upon the purport of other records found at the same place, the Kaṅkāli Tīlā; moreover, they happen to include also records of Kanishka and of Vāsudēva. And here, again, the only extant portions of the name are the last two syllables *shkasa*, of the genitive case. That part of the name which preceded them has been entirely broken away and lost. And there is nothing to shew that we must take the name to have been either Huvishka or Kanishka.

There is also one other record, attributed to Huvishka, which calls for some notice. It is the Mathurā inscription which has been edited by Dr. Bühler, with a lithograph, in *Epigr. Ind.*, vol. ii. p. 206, No. 26. It presents the king's name in the form of Puksha according to the lithograph, though Dr. Bühler's text gives [Hu]ksha. However, we are not concerned with that point here. The record seems to begin, as suggested by Dr. Bühler, with that line which contains the name Huksha or Puksha. Two lines above that, there stands a word which Dr. Bühler read as *ēkunatī*[*śa*], 'the twenty-ninth,' and which he said "seems to belong to "the date." He added the remark: "The year 29 would fall "in the reign of Huvishka." From that, this record, also, has come to be treated as a record of Huvishka dated in the year 29. And it has been entered as such, but with an expression of uncertainty about the date, as No. 23 in Mr. Vincent Smith's list. But it is by no means certain that the passage which contains the word which has been read as *ēkunatī*[*śa*], is even part of the record which mentions the king Huksha or Puksha. It would be most exceptional, as regards the practice observed in the early records at Mathurā, that a date should be expressed in words, instead of by numerical symbols. Between the word which has been read as *ēkunatī*[*śa*] and the following word *a*[*ra*]*ha*[*tō*], there is no room for the other details which it was customary to add in giving the dates of these early records. And, in

fact, it is at least extremely doubtful whether the word *ēkunatī*[*śa*] can be part of a date at all.

In short, the earliest established date for Huvishka is in the year 33; from the Mathurā record entered as No. 27 in Mr. Vincent Smith's list. And the latest date established for Kanishka is in the year 18; from the Manikyāla record entered as No. 14 in his list. And the king Vāsashka, or Vāsishka or Vāseshka, with a date in the year 28, established by the Sāñchi record, comes in quite naturally between those two kings.

In paragraph 1 of his Progress Report for 1895–96, Dr. Führer has said that, in the explorations made by him in the Katra mound at Mathurā, which brought to light fragments of an ancient Buddhist *stūpa*, "on the pavement, "composed of large red sandstone slabs, a short dedicatory "inscription was discovered, according to which this stūpa was "repaired in Samvat 76 by the Kushana King Vāsushka." This record has been entered by Mr. Vincent Smith as No. 56 in his list, as a record of Vāsudēva. But we have not as yet the text of this record; and much less any facsimile of it. And we require some much more definite information about it, before we can decide that it really does put forward the name Vāsushka, and that it mentions it in connection with the year 76, and, consequently, that it establishes it as a variant of the name Vāsudēva. That may possibly be the case. But it is not at all probable, *primâ facie*. And it is much more likely that here, again, we have a misreading of the symbol for 20, or else of the name of the king.

* * * * *

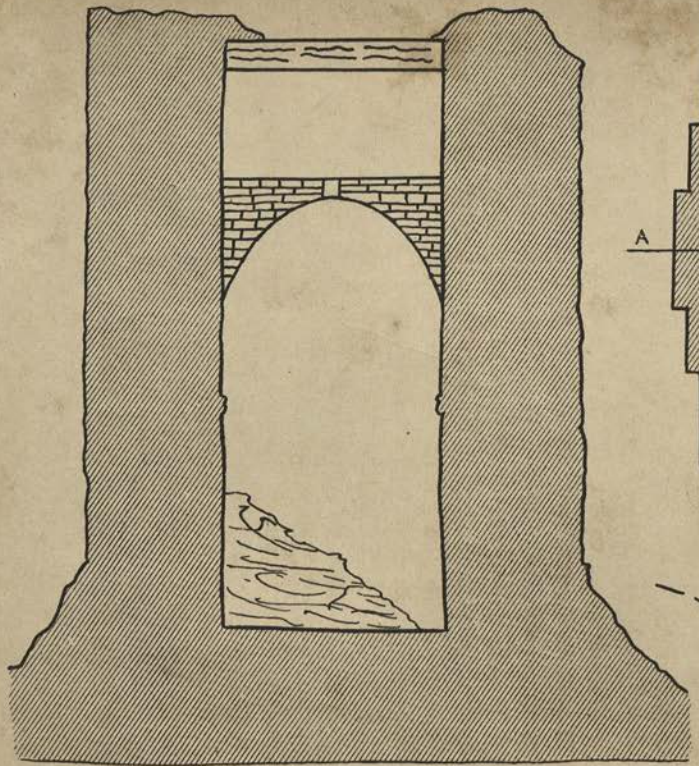
The above remarks were written as a section of an article dealing with the main point at issue, the date of Kanishka. Pressure of certain affairs prevents me from completing that article at present; and it may be six months before I can hope to publish it. Meanwhile, I issue now the above note, which has an interest of its own; and I will also indicate, in a few words, what I shall hereafter establish in detail regarding the main question.

The leading mistake has been the assumption, ever since the time of Professor H. H. Wilson, that Kanishka came after that king whose name appears as Ooēmo-, Hoēmo-, or Hwēmo-Kadphisēs in the Greek legends on his coins, and in the Kharōshṭhī legends as, most probably, Hima-Kapiṁśa. In reality, the Kadphisēs group of kings came after Vāsudēva.

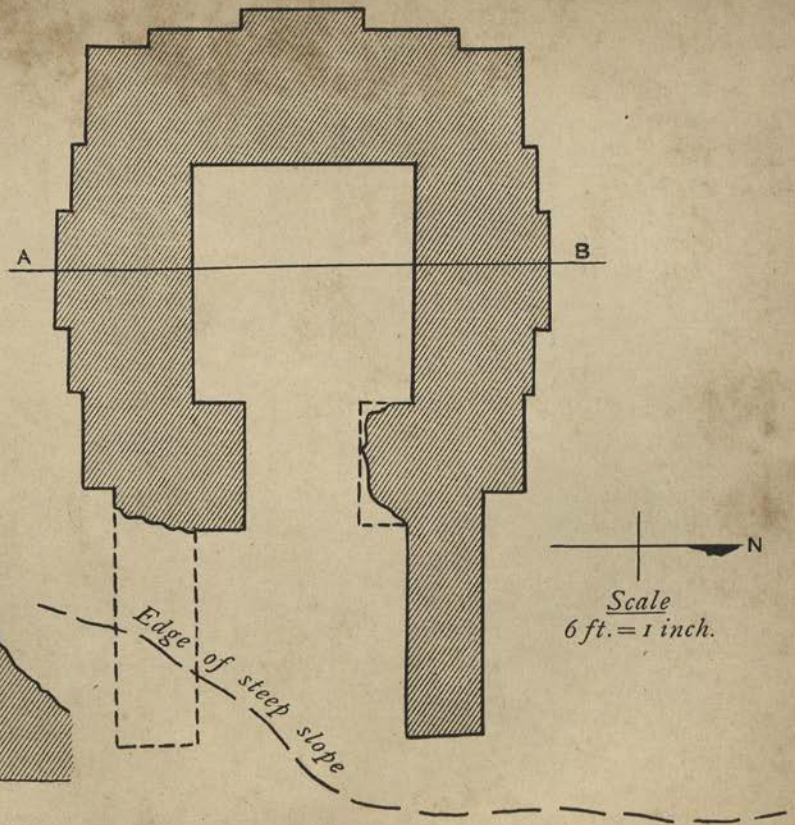
On the other hand, a valuable suggestion made by Professor H. H. Wilson has been lost sight of, and consequently has not been worked out to its proper result. He expressed the opinion, and shewed some reasons for it, that Kanishka founded "a new dynasty," different from that of the Kadphisēs group. In reality, Kanishka belonged to a separate clan, sept, or ruling house of the Kushaṇ tribe, which made its way from Khōtan into Kashmīr, and thence into India, about a century before the time when, the first member of the Kadphisēs group having established the supremacy of his branch of the tribe in the country on the banks of the Oxus, his son invaded and conquered India from that direction.

The idea that the Laukika reckoning of Kashmīr, or any system of reckoning by "omitted hundreds," can be used to fix any exact date for Kanishka is altogether illusory. No such system existed in India in any early times. It was devised in only the ninth or tenth century A.D.

The records ranging from the year 4 to the year 384, and mentioning, amongst other details, the names of Kanishka in connection with the year 5, of Śoḍāsa in connection with the year 72, of Moga and Patika in connection with the year 78, and of Guduphara-Gondophares in connection with the year 103, are records the dates of which all belong to one and the same era. And, as was originally the opinion of General Sir Alexander Cunningham, that era is the era, commencing in B.C. 58, which is now known as the Vikrama era. We shall obtain more records dated in the second and following centuries of it, when we discover and explore a Śaiva site at Mathurā or somewhere in that neighbourhood.



Elevation on A—B



KĀLAR TEMPLE, JHELUM DISTRICT.

Art. XII.—*An Ancient Hindu Temple in the Panjāb.*

By W. S. Talbot, I.C.S.

Some twelve miles east of the junction of the Sawān with the Indus, between Makhad and Kālābāgh, and about three miles due south of the village of Shāh Muhammad Wālī in the north-west corner of the Jhelum (Jehlam) district, is an old temple called Kālar or Sassī dā Kallara, which has hitherto escaped notice. It is situated at a height of about 1,100 feet above sea-level, on the edge of a hillock rising steeply from the bank of the Kas Letī, one of the torrents, tributary to the Sawān stream, which descend from the northern face of the Salt Range; it here passes through a rough tract of hillocks and ravines. The temple is in a ruinous condition, due largely to the gradual wearing away of the soft sandstone hillside on the edge of which it stands, and its further decay will probably be rapid.

The plan and elevation reproduced in the Plate show the dimensions of the building, but it will be convenient to note here a few of the principal measurements.

Exterior: extreme length, including portico, 22¼ feet; extreme breadth, 16 feet; height, 23½ feet, or, including the pile of bricks on one corner, about 28½ feet. Interior: the temple is a square of 7¼ feet, and the portico had apparently almost the same floor measurements. Height from floor of temple to spring of dome, just 10 feet; to top of dome, 14¼ feet; to top of upper chamber, 17¾ feet, or, including the thickness of the beams above it, 18¼ feet.

The temple is built of large bricks, 2 inches thick, varying in length from 15½ to 17 inches or more, and in breadth from 10 to 10½ inches. On the outer walls these bricks are elaborately carved, as shown in Plate.

Within, the temple (which was reached through a portico divided from it by a short passage) has small recesses, 14½ inches high, in the north and south walls, 4 feet above the floor; and there were corresponding recesses of somewhat smaller size in the walls of the portico also. At a height of 7 feet from the floor is a band of ornamentation, 8 inches deep, repeating part of that on the outer walls. The interior of temple and portico is otherwise plain; it shows signs of having been once plastered.

Ten feet from the floor the corners are filled with six courses of overlapping bricks, which gradually reduce the opening to a circle. Above come thirteen courses, nine laid flat and the last four on their edges; these form a dome ending in a small hole, of which the covering is no longer in place, the dome being otherwise intact.

Above the dome is the roughly laid brick flooring of a small upper chamber, only 3½ feet high, of the roof of which a few weather-worn beams still remain in place. Everything, practically, above this has disappeared. On one corner stands a rough pile of bricks, about 5 feet high, but this was evidently no part of the original building.

The temple faces due east, commanding a wide view in that direction as well as to the north. Immediately in front is the steep slope of the hill, which has evidently lost much by erosion since the temple was built. One side of the portico has been completely undermined, and has fallen, carrying with it the roof of the porch; the slope below is covered with their débris.

In the graveyard of Shāh Muhammad Wālī stands a block of *kaniat* (tufa) stone, 12 by 8 inches in section; part is buried in the ground, but its length seems to be about 5 feet, and it is only part of the original block. This stone is said to have stood erect in the centre of the portico entrance of the Kālar temple; when the portico collapsed the stone went with it down the hill, and this, one of the pieces into which it was broken, was eventually carried off by a man of Shāh Muhammad Wālī for use in building a house. He fell ill and died soon afterwards, and the villagers, ascribing his fate to the anger

(1) KĀLAR TEMPLE, FROM SOUTH-WEST.

(2) KĀLAR FROM NORTH.

of the spirits guarding the temple, disposed of the stone by using it as his gravestone. The block is merely a rough-hewn slab, and can hardly have been used as a pillar, as is stated; it was more probably the sill across the entrance of the portico.

There is now no sign of image or pedestal of any kind in the temple; but the floor is choked with a mass of rubbish, which has not been cleared out. Partial excavation, to ascertain the level of the floor, yielded nothing of interest.

Close to the walls of the building I picked up a coin of Venka Deva, whose reign is placed by Cunningham[1] in the last part of the eighth century A.D.[2]

The whole of the flat top of the hill on which the temple stands, about an acre in extent, is covered with the ruins of houses, built apparently as village houses are now, of rough blocks of sandstone in mud, without mortar. The nearest existing village is that of Shāh Muhammad Wālī, three miles away; adjoining it is a low mound of some size, covered with broken pottery. This site, called Kalri, is certainly a very old one, and may have had some connection with the Kālar temple, but nothing has been found to show its date.

Of the origin of these places nothing is known locally. In the popular mind the Kālar temple, otherwise Sassī dā Kallara or Sassī dī Dhaular, is connected with the well-known folk-tale of Sassī, the king's daughter, and Punnūṅ, the camel-driver of Mekrān; but it may safely be said that the building has nothing to do with this popular story, and that the connection was suggested merely by its name.

Photographs of the temple were sent to Dr. M. A. Stein, who writes as follows:—"In style the temple closely resembles two small shrines standing amidst the ruins of Amb, Shahpur District, but these are of a kind of tuffo stone. I do not think the details visible in the photographs permit a close dating, but seventh to ninth century of our era would

[1] "Coins of Mediæval India," pp. 55–65.

[2] The coins commonly found in this tract include those of the later Græco-Bactrians, and of the Indo-Scythians, Sassanian coins, those of the Brahman kings of Kabul, etc., etc.

probably be an approximate date. The large size of the bricks points to the earlier limit. . . . . It is evident from the general look of the structure that it was a Hindu temple. Closer examination of the cella might show whether it was dedicated to Śiva or Vishnu."

On the materials available no more definite conclusion as to the date of the temple appears to be possible. The small shrines at Amb referred to in Dr. Stein's note appear in the background of the photograph reproduced in Plate (3). In style of ornamentation, as well as in general arrangement, their resemblance to the Kālar temple is striking, and it can hardly be doubted that their date is approximately the same. Of these Amb temples, which lie about fifty miles due south from Kālar, Cunningham writes that they "are all of the Kashmīrian style, but almost certainly of late date, as all the arches have cinquefoil instead of trefoil heads, which is the only form in Kashmir. I think, therefore, that their most probable date is from 800 to 950 A.D."[1] (At Kālar there is no arch remaining.)

The temple also much resembles one of those at Kāfir Kot (about sixty miles south-east of Kālar), described in Arch. Reports, xiv, 26-28.

[1] Arch. Reports, xiv, 34.

(3) TEMPLES OF AMB, SHAHPUR DISTRICT.

ART. XIII.—*A Malay Coin.* By Lieut.-Colonel GERINI.

MY esteemed friend Mr. Henry G. Scott, Director of the local Royal Department of Mines and Geology, who had just returned from a tour of inspection of the mining districts in the Malay Peninsula, sent to me for examination two small gold coins which he had obtained in the course of his tour. They were found, together with a considerable number of similar coins, by some people who had occasion to dig a hole in the grounds of a Siamese *Wat* (Buddhist monastery) in the province of Jaring, near Patani. This was more than a year ago. Jaring is a Malay state, but has a large Siamese population which is comparatively modern.

Mr. Scott says: "I fear there will be difficulty in obtaining any more specimens, as after the coins had got into the hands of many various people the priests of the *Wat* laid claim to them, and persuaded the local Raja to issue an order that anyone would be punished who did not return any they had. The natural result would be that the holders would beat them up into rings or other ornaments to avoid detection. When Phrah Yot Bhakdi (the Siamese Commissioner) came on the scene he did all he could, but was only able to secure five of the coins, two of which he gave to me, those being the ones I send you."

The coins struck me at once as being of the Southern Indian type; and but for the inscription in Arabic characters on the reverse, I would have pronounced them to be gold fanams such as were current in Rajamahendri and Maisur

several centuries ago. The figure on the obverse, which I take to be that of a maneless lion facing left, is known to be characteristic of the coins from the last-mentioned districts; while the size, the granulated border, and, to some extent, the weight (which I found to be nine grains troy) closely correspond to those of the gold fanams from the same and neighbouring districts represented in Sir Walter Elliot's "Coins of Southern India," pl. ii. As, however, most of the early coins of Indo-China have been fashioned after the model of the Southern Indian currency, I concluded, on the evidence of the Arabic characters of the inscription on the reverse, that the specimens in question must have been struck in one of the Muhammadan states of the Malay Peninsula, and that they cannot be older than the introduction of Islamism into that region, usually put down at the beginning of the fourteenth century or the end of the thirteenth.

This point settled, it next remained to determine which was the state where the coins were struck, and this I thought to be a comparatively easy task, as its name was apparently represented on the reverse. Examining, then, the inscription on the basis of the Arabic-derived alphabet in use in the Malay States, I noticed that it consisted of the three characters ك, ل, and ه, which, taken together, may tolerably well read '*Kalah*.' Of the correctness of this reading I am far from certain, as I am not an expert at Arabic lore, and as further I observe that the characters ل and ه are here represented in the forms which they take when being, respectively, isolated and initial letters. Whether this has also been the rule in the old days or not I am unable to say; it is a question for specialists, to whom I gladly leave it to decide. Nevertheless, I remained at the time and am still under the impression that the word *Kalah* may be intended, which is the well-known name of a thriving seaport on the Malay Peninsula, transmitted to us in the records of the Arab travellers to the Far East in the ninth century, and in the works of the Arab geographers who flourished subsequently to that period. On comparing the inscription

on the coins with the Arabic form of *Kadah* given in Reinaud's "Relation des Voyages," etc. (Discours préliminaire, p. lxii, footnote), I noticed the same difference in the shape of the characters which had struck me as irregular in the preliminary examination of the former. Reinaud writes, in fact, كله, while the coins have كل ه. But I thought that, after all, such trifling irregularities would not influence the reading to such an extent as to make it totally different from the one I had adopted. The coin sent herewith had already had a gold ring fitted on to it for the purpose of its being hung on the neck of the person who recently got possession of it. I had the ring removed, hence the marks on either side near the edge of the coin.

Remarks by Dr. Codrington.

There is little doubt that the obverse of this small gold coin is an imitation of a Southern Indian fanam bearing the figure of the maneless lion, but what particular fanam was the model one cannot say. The head of the animal and the sun on its left have been destroyed by the ring soldering, but the figure of the moon is seen on the right above the shoulders; the legs and feet are very unlike those of a lion. The reverse, however, I do not hesitate to read السلطان العادل; or possibly الملك, above that word having been effaced. The initial ا, as is not uncommonly the case, slopes considerably to the right, and its lower end nearly joins the top of the د, thus almost making a ك in initial form as read by Colonel Gerini. A careful examination shows that the ا does not quite touch the د. السلطان العادل is the distinguishing title of the kings of Achin (Atjih), and on the earlier known coins of that dynasty it is the sole legend on one side, the lettering and surrounding granules being much the same as on this coin. H. C. Millies, in "Recherches sur les monnaies des Indigènes de l'Archipel Indien et de la Péninsule Malaie,"

describes several of these Achin coins, the earliest of which he attributes to Salah al Din, who, according to the "Malay Annals," was the ninth king (A.H. 917–946), the one who revolted from the king of Pedir and made Achin an independent kingdom. He writes thus on p. 72: "C'est au roi Saláh-ouddîn que je crois pouvoir attribuer la plus ancienne monnaie d'Atjih, que j'ai pu découvrir jusqu'ici et qui se trouve dans la collection de M. Soret à Genève et dans la mienne. C'est une petite pièce en or comme les suivantes, de l'espèce que les Malais nomment *mas* (مس). L'avers porte, comme les suivantes, simplement السلطان العادل *le Roi juste.* Je lis le revers صالح ابن على خلد سلطانة." The author then speaks of the probable error of صالح for صلاح. A coin of Salah al Din's brother and successor, Ala al Din (A.H. 946–975), has the same obverse. Coins of the eleventh to the sixteenth kings are not given by Millies, but he has one of the seventeenth, Ala al Din Rayat (A.H. 996–1011), and the currency of the succeeding seven or eight kings and queens seems to be not very rare, as they are mentioned in several catalogues. The figures of these coins on plate xvi of Millies' book show, I think, that the coin under notice belongs to the same series, and it may be attributed to Salah al Din, the ninth king above mentioned, or to one of his predecessors.

There is nothing strange in finding on a Muhammadan coin a figure imitated from a coin of an unbeliever; there are many examples of such having been done from the earliest Muhammadan times to quite lately, and in the farthest west as well as in the extreme east of Asia. In the case of the early kings of Achin it might almost be expected, for, as far as we know, Sumatra was for a considerable time very largely Hindu, being probably one of the first islands in the Archipelago to receive Indian immigrants, and it continued to do so for a long period. Hindu remains and inscriptions show that Hindu influence was very great in the country, and that there was probably a powerful Hindu kingdom in it.

According to the "Malay Annals," translated in the Journal of the Indian Archipelago, vol. iv: "On Friday, the 1st of Ramazan, in the year of the flight of the Holy Prophet of God (601), Sultan Juhan Shah came from the windward and converted the people of Acheen to the Mahomedan faith." But it is probable that this genealogy of the kings of Achin is not to be depended upon as correct with regard to the early rulers; doubt is thrown upon it by the length of the reigns of the first seven of them, extending over 300 years. By some it is thought that these kings are fabulous, and that the dynasty began with Salah *al* Din (A.H. 917), but, without going so far as that, it may be safely said that the beginning of the Muhammadan line of kings should be put at a century or more later than A.H. 601.

Nor is it surprising that coins of an Achin king should be found in Jaring, near Patani, for we learn that soon after those countries became known to the Portuguese, who arrived there first in A.H. 928, the kingdom of Achin extended rapidly so as to include all the other States of Northern Sumatra, and further, within a century, to neighbouring islands and to the States of the Malay Peninsula.

This interesting little coin has, in accordance with Colonel Gerini's wishes, been presented to the British Museum National Collection, in the name of Mr. H. G. Scott.

ART. XIV.—*Notes from the Tanjur.* By F. W. THOMAS, M.R.A.S.

1.

I PRESENT here a short tract from Mdo, vol. cxxxiii, foll. 330–2, entitled *Īśvarakartṛtvanirākṛtir Viṣṇorekakartṛtvanirākaraṇam*, or "Refutation of the idea of God as Creator (*sic*): Refutation of the idea of Viṣṇu as sole Creator (*sic*)." It is ascribed to Nāgārjuna, who is named as the author of about one hundred works noted by me in the Tanjur. The fact that it appears in one of the last volumes of the Mdo, and that both the Sanskrit and the native versions are given, seem to indicate that the work was a comparatively late accession to the Tibetan collection. I give both versions in order to fix the text. The work is, as will be seen, of a simple type, adapted, as it states, to the learner (*suśiṣyapratibodhārtham*), and in character quite different from the famous nyāya treatise of Udayana, the Kusumāñjali, which seeks to establish the contrary.

We may note the occurrence of two laukika-nyāyas recorded by Colonel Jacob in his "Second Handful," p. 61, namely, the "Acrobat" and the "Sharp Knife."

। र्ग्य गर् स्कद् दु ।

। ईश्वरकर्त्तृत्वनिराकृतिर्विष्णोरेककर्त्तृत्वनिराकरणं नाम ।

गुरोः पदाम्बुजं नत्वा वज्रसत्वं च भक्तितः ।

सुशिष्यप्रतिबोधार्थं कृपया लिख्यते मया ॥

अस्ति पुनरीश्वरः कर्त्ता स एव विचार्यतां । यः करोति स कर्त्ता । यः क्रियां करोति स कर्त्तृसंज्ञो भवति । अत्र च वयं ब्रूमः । किमसौ

सिद्धं करोति अथासिद्धं वा । अत्र सिद्धं तावद् न कुरुते । साधनाभावात् । यथा सिद्धे पुद्गले पुनःकारणत्वं कर्त्तृत्वं नास्ति प्रागेव सिद्धत्वात् । अथासिद्धं करोति चेत । बालुकातैलमसिद्धं । कूर्म्मलोमादिकमसिद्धं । एतदेव करोतु । पुनरत्र कर्त्तृत्वं न शक्नोति[1] । कुतः । असिद्धत्वभावात् । एवमसौ । अथ सिद्धासिद्धं करोति । तदपि न घटते । परस्परविरोधात् । यः सिद्धः स सिद्ध एव योऽसिद्धः स एवासिद्धः । एवं तदनयोः परस्परविरोधः स्यादेव[2] । यथा चालोकान्धकारयोर्जीवनमरणयोरिव । अथ यत्रालोको विद्यते तत्रान्धकारो नास्ति । यत्रान्धकारस्तत्रालोको नास्त्येव । यो हि जीवति स जीवत्येव । यो मृतो मृत एव स । अत एव सिद्धासिद्धयोरेकत्राभावाद् ईश्वरस्य कर्त्तृत्वं नास्त्येवेति मतं । किं च अपरमपि दूषणं स्यात् । किं स्वयमुत्पद्य परान् करोति । अनुत्पन्नो वा । अनुत्पद्य च स्वयं तावदपरान् कर्त्तुं न शक्नोति । कुतः । स्वयमेवानुत्पन्नरूपत्वात् । यथानुत्पन्नस्य बन्ध्यातनयस्य कुद्दालपातनादिक्रिया न प्रवर्त्तते । तथेश्वरस्यापि । अथ च स्वयमुत्पद्य परान् करोति । तदा कस्मादुत्पन्नः । किं स्वतः किं परतः । उभयतो वा । अत्र स्वतस्तावन्नोत्पन्नः स्वात्मनि क्रियाविरोधात् । न हि खरतरकरपालधारा स्वमात्मानं छेत्तुं समर्था भवति । न हि सुशिक्षितोपि नटबटुः स्वकीयं स्कन्धमारुह्य नर्त्तितुं शक्नोति । किं च स्वयमेव जन्यः स्वयमेव जनक इति । इत्येवं दृष्टमिष्टं वा । स्वयमेव पिता स्वयमेव पुत्र इति । नैष[3] वादो लोकप्रसिद्धः । अथ भवतु पर एवमपि न घटते । यावतेश्वरस्य व्यतिरेकेण परस्याभावात् । अथ पारंपर्य्याद् भवतु । एवं च परतो

[1] ? read सिध्यति ? Cf. Tibetan equivalent.

[2] Text has वं.

[3] Text has निष.

ऽप्यत्रानवस्थाप्रसङ्गः स्यात्। अनादिरूपत्वात्। सतो यस्यादेरभावस्त-
स्यावसानस्य दूषणमभाव एव। बीजस्याभावे ऽङ्कुरदण्डशाखापत्र-
पुष्पफलादीनामभावो भवति। कुतो। बीजस्याभावात्। नोभयतः।
उभयदोषदुष्टत्वात्। तस्मादसिद्धः कर्त्ता। इतीश्वरकर्त्तृत्वनिराकृतिर्वि-
ष्णोरेककर्त्तृत्वनिराकरणं समाप्तमिति।

कृतिरियमाचार्यश्रीनागार्जुनपादानामिति।

| Bod . skad . du | dbaṅ . phyug . byed . pa . po . ñid . sel . ba . daṅ . khyab . *h*jug . byed . pa . po . cig . ñid . sel . bar . byed . pa . żes . bya . ba |

saṅs . rgyas . la . phyag . *h*tshal . lo |

| bla . ma*h*i . żabs . kyi . chu . skyes . daṅ |
| sdoms . sems . la . *h*aṅ . gus . btud . nas |
| slob . ma . byaṅ . bos . rtogs . bya*h*i . phyir |
| bdag . gis . brtse . bas . bri . bar . bya |

| yaṅ . dbaṅ . phyug . byed . pa . po . ñid . du . yod . ces . pa . *h*di . la . rnam . par . dpyad . par . bya*h*o || gaṅ . byed . pa . de . byed . pa . po . daṅ | gaṅ . bya . ba . byed . pa . de . byed . pa . po*h*i . miṅ . du . hgyur . na | *h*di . la . yaṅ . khyed . rnams . la . smras . pa | ci . *h*di . grub . pa . żig . byed . dam . *h*on . te . ma . grub . żig . byed | de . la . grub . pa . ni . re . żig . mi . byed . de | sgrub . byed . med . pa*h*i . phyir . ro | dper . na . gaṅ . zag[1] . *h*grub[2] . pa . la . yaṅ . rgyu*h*i . byed . pa . ñid . byed . pa . por . med . de | sṅon . ñid . du . grub . pa*h*i . phyir . ro | ci . ste . ma . grub . pa . byed . na | bye . ma . la . til . mar . ma . grub . pa . daṅ | rus . sbal . gyi . spu . la . sogs . pa . ma . grub . pas | de . ñid . byed . na | yaṅ . *h*dir . byed . pa . po . ñid . kyis . mi . *h*grub . ste | ci . las . że . na | dṅos . po . ma . grub . pa*h*i . phyir . ro | de . bżin . du . *h*di . *h*o | ci . ste . grub . pa . daṅ | ma . grub . pa . byed . na . de . yaṅ . mi . *h*thad . de | phan . tshun . *h*gal .

[1] Text, *zab*. [2] *Sic*.

ba*h*i . phyir . ro | gaṅ . grub . pa . de . grub . pa . ñid . daṅ | gaṅ . ma . grub . pa . de . ñid . ma . grub . pa . ste | de . ltar . na . *h*di . dag . phan . tshun . *h*gal . ba . ñid . kyi . phyir . ro | dper . na . snaṅ . ba . daṅ . mun . pa . dag . daṅ | gaṅ . gson . pa . daṅ . śi . ba . dag . pa . bżin . no | yaṅ . gaṅ . na . snaṅ . bo . yod . pa . de . na . mun . pa . med . do | gaṅ . na . mun . pa . yod . pa . de . na . snaṅ . ba . med . pa . ñid . do | gaṅ . gson . pa . de . ni . gson . pa . ñid . daṅ | gaṅ . śi . ba . de . ni . śi . ba . kho . na . ste | de . ñid . kyi . phyir . grub . pa . daṅ . ma . grub . pa . dag . gcig . la . med . pa*h*i . phyir | dbaṅ . phyug . byed . pa . po . ñid . du . yod . pa . min . pa . ñid . do . żes . *h*dod . do | sun . *h*byin . gżan . yaṅ . *h*gyur . te | ci . raṅ . ñid . skyes . pas . gżan . byed . dam | *h*on . te . ma . skyes . pas . byed | raṅ . ñid . ma . skyes . pas . ni . re . żig . gżan . byed . par . mi . nus . te | ci*h*i . phyir . na | raṅ . ñid . ma . skyes . pa*h*i . ṅo . bo . yin . pa*h*i . phyir . ro | dpe . na . mo . śam[1] . gyi . bu . ni . ma . skyes . pa . sa . rko . ba . la . sogs . pa*h*i . bya . ba . la . mi . *h*jug . pa . bżin . no | de . bżin . du . dbaṅ . phyug . kyaṅ . ṅo | ci . ste . raṅ . ñid . skyes . pas . gżan . byed . na | de*h*i . tshe[2] . raṅ . ṅam . gżan . nam | gñis . ka . las . sam | ci . żig . las . skye | *h*dir . raṅ . las . skyes . pas . ni . ma . yin . te | raṅ . gi . bdag . ñid . la . bya . ba . *h*gal . ba*h*i . phyir | ches . rno . ba*h*i . ral . gri*h*i . sos . kyaṅ . raṅ . gi . bdag . ñid . la . gnod . par . nus . pa . med . do | legs . par . bslabs . pa*h*i . gar . mkhan . mkhas . pas . kyaṅ . raṅ . gi . phrag . pa . la . żon . nas . gar . byed . nus . pa . med . do | yaṅ . ci . raṅ . ñid . kho . na . bskyed . bya . daṅ . raṅ . ñid . kho . na . bskyed . byed . do . żes | *h*di . ltar . blta[3] . żiṅ . *h*dod . na | raṅ . ñid . pa . daṅ . raṅ . ñid . bu*h*o . żes . zer . ba . daṅ . *h*dra . ste | *h*di . ni . *h*jig . rten . na . grags . pa . yaṅ . med . do | ci . ste . gżan . pa . ñid . kyis . kyaṅ . byed . pa . mi . *h*thad . de | ji . srid . dbaṅ . phyug . gi . tha . dad . pa . gżan . med . pa*h*i . phyir . ro | ci . ste . brgyud . pas . *h*gyur . ro . że . na | de . lta . gżan . las . kyaṅ . thug . pa . med . par . thal . bar . *h*gyur . te | thog .

[1] *Sic* = gśam.
[2] Text has *che*.
[3] *Sic*.

ma . med . pa*h*i . phyir . ro | gaṅ . la . daṅ . po . yod . pa . min . pa . de*h*i . mtha*h*i . yaṅ . sun . *h*byin . pa . med . pa . ñid . do | sa . bon . med . na . myu . gu . daṅ . sṅoṅ . bu . daṅ . yal . ga . daṅ . lo . ma . daṅ . me . tog . daṅ . *h*bras . bu . sogs . med . par . *h*gyur . te | ci . las . ǰe . na . sa . bon . med . pa*h*i . phyir . ro | gñis . ka . las . kyaṅ . min . te | gñis . ka . skyon . gyis . sun . byuṅ . ba*h*i . phyir . ro | de*h*i . phyir . byed . pa . po . mi . grub . bo | ǰes . pa . dbaṅ . phyug . byed . pa . po . ñid . sel . ba . daṅ . khyab . *h*jug . byed . pa . po . cig . ñid . sel . bar . byed . pa . slob . dpon . dpal . ldan . klu . sgrub . kyi . ǰal . sṅa . nas . mdzad . pa . rdzogs . so ||

kha . lu . lo . tsa . dha . rma . pā . la . bha . dras . bsgyur | bodasya[1] . śi . ṣye . ṇa . li . [khi] . taṃ |

2.

The following collation records the readings of the Tibetan version of the Kāvyādarśa (Tanjur Mdo, cxvii, foll. 78–103), as compared with the *varietas lectionis* given in Böhtlingk's edition of the work. It will be seen that it presents both agreements and disagreements with Böhtlingk's text, the relation of which to that of Premachandra Tarkavāgīśa is explained in the preface. I have taken into account the readings of the Oxford MS. as recorded (after Aufrecht) in the appendix.

I. 1. dīrgham (riṅ . du).
2. upalakṣya (ñer . mtshon).
5. paśya naśyati (ñams . pa . med . la . ltos).
10. alaṃkāraśca, *sing.*? (rgyan . yaṅ . rab . tu . bstan).
12. titīrṣūṇām (rgal . *h*dod).
13. aṅga (cha . śas).
15. sadāśrayam (legs . pa . la . brten).
āyattam (dbaṅ . gyur).
19. sargāntair (sarga . dag . gi . mtha*h*).
20. upāttārthasampattir (sbyar . rnams . phun . tshogs).

[1] The text is here obscure. The probable reading will be *bsgyur . baho | tasya . . .*

25. bhedakāraṇam (dbye . ba*h*i . rgyu).
27. lambhādi (*sic*).
30. mukham (sgo).
32. āptās (mkhas . pa).
36. sthitiḥ (gnas).
37. skandhakādi yat (skandhaka . sogs . gaṅ).
38. kathādi (gtam . sogs).
39. ? (stabs).
40. varṇyate? | de . la . vai . darbha . daṅ . ni | | gau . ḍa . bar . khyad . gsal . ba . brjod |
50. *probably* vavṛte (*h*byuṅ . bar . gyur).
60. nigacchati (ster . par . byed).
61. eva (kho . na).
62. etam (*h*di).
66. sandhāna (mtshams).
69. hi (gaṅ . phyir).
78. sādhu (legs)
80. tad *and* dṛśyam (de *and* blta).
94. yatra (gaṅ . du).
98. klānta (ña*l*).
stanantyo (*h*khun).
imāḥ (*h*di . dag).
100. *probably* tam ekam (*h*di . ñid).

II. 2. parisaṃskartum (rab . tu . legs . sbyar . phyir).
10. parivṛtya (yoṅsu . bskor . nas).
13. °dravyasva°.
18. śaṃsinī.
29. *probably* sarūpa—samāna (mtshuṅs—mñam).
62. sandhatte (*h*gog).
63. muṣṇāti (*h*phrog).
65. sūcaka (gsal . byed), (c *and* d *omitted*).
75. so 'pi (*h*di . yaṅ).
83. yasyati (*h*bad).
89. candrasya (zla . ba . la).
90. asamagro (gaṅ . ba . ma . yin).
109. ? (sel . bar . byed).
117. āśānām (phyogs . rnams . kyi).

118. ? (diṅ).
119. adya (de . riṅ).
129. sundarī sā na vety (de . ni . mdzes . sam . ma . yin . ǯes).
134. nivartanāt (bzlog . pa*h*i . phyir).
135. yāhi tvam (gśegs . par . mdzod).
atra (*h*di . la).
138. pratyācakṣāṇa° (rab . bśad).
143. randhrānveṣaṇa (glogs . *h*tshol).
149. te (khyod . kyi).
150. tasyārthasyaiva sūcanāt (don . *h*di . ñe . bar . gsal . byed . phyir).
151. yadraktanetrām ? (bgos '*clothed*' *for* gos '*stained*').
155. *omitted.*
157. tvad (khyod . kyi).
158. sānukrośo 'yam ākṣepaḥ (*h*di . ni . mya . ṅan . gyis . *h*gog . pa*h*o).
161. tapaḥ (bka*h* . thub).
sakalaṃ (mtha*h* . dag).
170. yuktātmā (*h*os . pa*h*i . bdag).
171. rūpavyaktyai (raṅ . bǯin . gsal . bya*h*i . phyir).
173. ete (*h*di . dag).
176. pāpam (sdig).
181. māhātmya (che . ba . bdag . ñid).
185. ayaṃ tu, *etc., as Böhtlingk.*
| *h*di . yis . khyed . gñis . tha . dad . da |
| de . ni . chuṅ . bdag . khyed . mkhas . so |
188. dvīpa (gliṅ).
194. *uncertain.*
195. *as Böhtlingk.*
200. asaṃmṛṣṭa (ma . phyis).
śuddhāmbu (daṅ . pa).
manohara (yid . ni . *h*phrog).
204. tat sā (de . phyir . de . ni).
214. -vartinī.
215. mallikāmālabhāriṇyaḥ sarvāṅgīṇ—
| malli . kā . yi . phreṅ . tshogs . can |
| lus . kun . khyab . pa*h*i . candan . gśer |

216. vyaktyai (gsal . phyir (?)).
218. *probably as Böhtlingk.*
| *h*o . ma . *h*dzin . pa*h*i . khur . gnas . pa |
| rnam . pa . gẓan . du . srid . pa . min |
221. yatra (gaṅ . du).
231. samo (mtshuṅs).
232. limpatau (*h*byug . pa . *h*di . la).
233. *uncertain.*
236. *uncertain.*
240. *probably* āpekṣyaiva (ltos).
249. mṛgā (ri . dags).
254. °apāśrayāḥ (brten . pa . ni).
257. ? (rgyas . par . gyur, '*increased*').
258. ravibālātapa (dmar . pa . ñi . gẓon).
263. tvadarpita (khyod . la).
264. atrāpi (*h*dir . yaṅ).
265. *uncertain.*
266. *no negative.*
276. *no negative.*
277. yuktaṃ (rigs . par).
280. mṛteti (śi . *h*o . ẓes . pa).
saṅgantuṃ (*h*grogs . phyir).
avantī.
286. devī (lha . mo).
289. °mālāyā (me . tog . rñiṅ . ma . khyod . kyi).
303. proktam (rab . tu . mtshon).
307. [nāma] no mataḥ (bdag . cag . *h*dod).
308. °ātmatā (bdag . ñid).
318. tu (ni).
323. yat tu (gaṅ . ẓig).
328. jagattrayam (*h*gro . ba . gsum . po).
330. utkṛṣṭair (*h*phags).
335. ākrāntaṃ (kun . tu . chags).
340. pratīyate (rab . tu . rtogs . bya).
īpsitastuti (*h*dod . pa . bstod).
341. *probably* arthair *or* dhanair (nor).
345. *uncertain.*
346. saṃkrāntā (chags).

348. yadi (gal . te).
349. vibhāvayitum (bstan . pa*h*i . phyir).
351. °bhāvasya° (°dṅos . po . brjod).
353. asubhir (dbugs).
362. *omitted in Tib.*
368. eva (ñid).

III. 1. tacca (de . yaṅ).
8. *no negative.*
11. manmana, *adj.* (yid . du . *h*os . pa . *h*di).
21. *probably* sersyam (phrag . dog . ldan . par . dag . po . la . *h*an).
31. *no interjection.*
38. vaksyante tatra (de . la . bstan . par . bya).
41. pramatta (spyod . la . bag . med).
ānanda (dga*h*).
na me phalaṃ kiṃ ca na (*h*bras . bu . *h*ga*h* . yaṅ . med).
57. ātmayā (bdag . ñid).
70. tatrāpi (de . la . *h*aṅ).
78. yadye° (gal . te).
98. āhuḥ (żes . par . brjod).
104. -ātmakaṃ nāma yasyāḥ (gaṅ . la . sbyor . phreṅ . bdag . ñid . kyi . miṅ . can).
126. ? sūribhiḥ (sñan . dṅags . la (kāvyeṣu) . sñan . dṅags . mkhan . gyis (kavibhiḥ) . spaṅ . bar . bya (varjya)).
128. *reading scarcely decipherable* (myos . pa . smyoṇ° ?).
129. so 'yam (*h*di . ni).
jarātura (brga).
132. na ca te ko 'pi (khyod . la . dgra . ni . su . yaṅ . med).
133. *probably* abhisaṅga (mṅon . pa . *h*chags).
139. cet (gal . te).
141. ? (*h*gah . żig . du).
142. nas (bdag . cag).
tvadāśayā (khyod . la . re . ba).
153. vaśyām (dbaṅ . gyur).

155. kaṭu karṇānāṃ (rna . par . rtsu : *no* de = tat).
158. smarasya (myos . byed . kyi).
160. asmanmanasyapi (bdag . gi . yid . la . yaṅ).
161. *first two pādas omitted.*
āsu rātṛṣv iti (mtshan . mo . *h*di . la . żes).
166. *as Böhtlingk.*
167. meghadurdina (sprin . gyis . gtibs).
176. saiṣā sarvatra dṛśyatām (lugs . *h*di . kun . tu . blta . bar . bya).

CORRESPONDENCE.

1. Note on Bibi Juliana and the Christians at Agrah.

Mr. H. Beveridge having lately read a paper at a meeting of the Society on the above subject, perhaps the extracts herewith sent, from letters written by a Catholic priest, one of Bibi Juliana's descendants, may be of interest to those who were present on the occasion referred to. Dr. J. P. Val d'Eremao was in feeble health at the time he wrote, and I regret that his death not long afterwards prevented our ever meeting, or the further prosecution of our joint researches. His statement that his grandfather, Emmanuel, was the son of Bibi Juliana, must be treated as 'legendary.' Captain Manuel must have been in 1803 in the period of active manhood. But Bibi Juliana died at the age of 75 in the year 1734, and could hardly have been a mother later than 1704. Thus any *son* of hers must have reached, in 1803, the ripe age of 99 years. Captain Manuel was therefore not her son, for he would, in that case, have been 99 in the year 1803: "which is impossible.—Q.E.D." Possibly he was the lady's grandson. Dr. Joseph Patrick Val d'Eremao was born at Sirdhana on the 18th January, 1841, and died at Woking on the 6th June, 1896.

William Irvine.

December 26th, 1902.

I.

NOTE BY DR. J. P. VAL D'EREMAO.

Oct. 8th, 1895.

Father Rocco Cocchio's "History of the Capuchin Missions" [Father Rocco Cocchio was afterwards a Bishop in South America] was written in Italian, and published (I believe) by the Propaganda Press, Piazza di Spagna, Rome. Messrs. Burns & Oates, Granville Mansions, corner of Orchard Street and Portman Square, W., would probably be able to get Mr. Irvine a copy; at any rate, by writing to the Direttore of the Tipografia Poliglotta della S. Congregazione di Propaganda Fide, Collegio della Propaganda, Piazza di Spagna, Rome, the book could be got or its publishers' address. It was published in the seventies.

For the papers of Father Symphorien Monard on the Padre Santoos Cemetery one would have to look up a file of the *Bombay Catholic Examiner*. I scarcely know where that could be done in England, except at No. 111, Mount Street, W., the Jesuit Provincial House. These papers, too, were published in the seventies, and are very interesting, though not quite accurate in some points.

I have copies of some of the old inscriptions on tombstones in the Padre Santoos Cemetery of Agra, which Mr. Irvine would be welcome to see; and as I know personally a good deal regarding the Capuchin Missions I could give Mr. Irvine much information, if I knew what points he is anxious to find out.

II.

The Institute, Woking.
Oct. 29th, 1895.

DEAR SIR,— . . . . I know Agra very well, and could probably answer any points that you may wish to be informed on . . . . Meanwhile I shall look up and send you the inscriptions copied by me in 1865 in the Padre Santoos

Cemetery. With the history, ancient and recent, of the Agra Mission I am partly conversant, and will be glad to help you on any point in my knowledge on which you may need information. Have you looked for the *Bombay Examiner* file at 111, Mount Street? If not, I'll enquire there when I pass by next time. It is the Jesuit Provincial House, and as the *Bombay Examiner* is edited by Jesuits (to whom the Archdiocese of Bombay belongs) they are very likely to have it.

Of the military adventurers in Northern India (1700–1800) there were several *centres*, and I could mention many names. The record of deaths and marriages was not, I fear, well kept. There are a few of the older books at Agra, but as the records were saved in the Mutiny (I personally assisted as a boy in smuggling them into the fort, in spite of Mr. Colvin's stupid order) I could get you copies of all entries of names you feel interested in.

I am personally interested in 'Bibi Juliana,' and I should feel much obliged for any reference to her that you could give me from Muhammadan sources. Colonel (now General) Kincaid wrote about the Bourbon family (of Bhopal) in the A.Q.R., 1st series, January, 1887, in which he mentions a Lady Juliana, "sister of Akber's wife," who married a Bourbon. But Bibi Juliana was my paternal great-grandmother one degree back, the recipient of a Jagir from Bahadur Shah I, still in the family.

Kincaid is a member of the E.I.U.S. Club, and you could meet him there too, and he could probably tell you something more on the subject. Mallison and Keene are two others who know a good deal on this particular subject. But I will not tire you out with more of my writing; should I, however, have the pleasure of meeting you as I suggested, we might get some information to bear on any topic regarding Agra which you might wish to have. . . . . Should you fail in getting Rocco Cocchio's "History of the Capuchin Missions" (not very full regarding Agra) please let me know, and I'll try and get a copy through some of my Capuchin friends here in England.

There is a Capuchin monastery at Crawley (Sussex), where they are almost sure to have it.—Yours faithfully,

J. P. VAL D'EREMAO.

III.

The Institute, Woking.
Dec. 3rd, 1895.

MY DEAR SIR,— . . . . I can at present with difficulty discharge my part of the duties of producing the *Asiatic Quarterly Review* for January. I hope, therefore, that you will allow me to write to you a little later on to fix a meeting.

Thank you for the points given in your previous letter regarding Bibi Juliana; they tally with our family history: the name written in Urdu ویل is Val, the rest of the surname being variously spelled De Ramão or D'Eremão, the way we spell it. I can give you our legendary account of the coming of the first D'Eremao to India; and if you can get hold of the records of the Delhi Residency in 1803–26 you would find a good deal about my grandfather, called by Lord Lake and others Captain Manuel (Emmanuel), Captain Vale, and Captain D'Eremao, who governed Hansi after the fall of George Thomas. I have copied a few documents at the India Office, but my subordinate position and heavy work prevent my giving to the research all the time it requires.

I have just now in India a lawsuit regarding the last of the Jaghirs of the family. John and Sebastian are names in our family, and my grandfather, Emmanuel, was the son of Bibi Juliana; my father, Domenic, would thus be the cousin of Isabel. But though I remember in my childhood hearing the names of Bourbon, Soisson, Brouet, etc., I cannot recall Gentil; he may have been spoken of by his Christian name only, as a connexion, which would account for that. More when we meet. I need not say how very important and interesting all this is to me.—With kind regards, yours sincerely,

J. P. VAL D'EREMAO.

2. Pāli and Sanskrit.

Ghent.
January, 1903.

Dear Professor Rhys Davids,—There is in the Ming Library a *Brahmajālasūtra* (Cat. of Nanjio, No. 554, 1087), one of the most interesting sūtras of the Great Vehicle. It has been translated by Professor de Groot, and fully illustrated by this able scholar in his "Code du Mahāyāna en Chine." But, except so far as the title is concerned, there is not the least relation between this book and the old Pāli Sutta edited by yourself and Mr. Carpenter, and translated in your "Dialogues of Buddha."

Now I have been so fortunate as to find a long passage, containing several quotations from the old sūtra, in the *Abhidharmakośavyākhyā*, where nearly everything, and, I hope, even the bulk of the *Visuddhimagga*, is to be found. This identification, like some others, noticed *en passant* in the September number of the *Journal Asiatique* for the year 1902 (ii, p. 237, n. 2), gives a new proof, if such were wanted, that the Buddhist Sanskrit Schools of the Middle Age were well furnished with materials of the most orthodox kind. I venture to send it you in full.

The quotation occurs at the foll. 382 B and following of the Société Asiatique's MS., and must be compared with the printed text of the Pāli Text Society, Dīgha, I, pp. 13, 17, 28 (1. 31; 2. 2; 2. 34). There are many little various readings of interest. It seems that the recension of our sūtra, which the author of the Kośa had before him in the sixth century A.D., was in some details independent of the Pāli. But I hope that you will, if possible, give your opinion on the matter.

[1] *pūrvāntakalpakānāṃ ca śāśvatavādināṃ Brahmajālasūtre vītarāgāṇāṃ kāmadhātvālambanānāṃ dṛṣṭīnāṃ samudācāra uktaḥ . pūrvajamnānusāreṇa ya evam utpannadṛṣṭikās te*

[1] The punctuation and, in some places, the spelling have been corrected.

pūrvāntakalpakāḥ[1] . *śāśvatavādino bahavas tatroktās, teṣām udāharaṇam ekaṃ darśayiṣyāmaḥ* . [2] ihaikatyaḥ śramaṇo vā brāhmaṇo vā, 'raṇyagato vā vṛkṣamūlagato vā śunyāgāragato vā, ātaptānvayāt[3] prahāṇānvayād bhāvanānvayād bahulīkārānvayāt samyagmanasikārānvayāt, tadrūpaṃ śāntaṃ cetaḥsamādhiṃ sprśati, yathā samāhite citte viṃçatiṃ saṃvartavivartakalpān samanusmarati . tasyaivaṃ bhavati : śāśvato 'yam ātmā lokaś ceti . *tadevaṃ sarva eva ete pūrvāntakalpakāḥ śāśvatavādino 'nayā śāśvatadṛṣṭyātmānaṃ lokaṃ cālambamānāḥ kāmadhātum apy ālambante, ity evaṃ kāmadhātvālambanānāṃ dṛṣṭīnāṃ samudācāra uktaḥ.*

tato (?) *tasmin eva Brahmajālasūtre pūrvāntakalpakānām ekatyaśāśvatikānāṃ vītarāgāṇām kāmadhātvālambanānāṃ dṛṣṭīnāṃ samudācara uktaḥ* . *katham* . [4] bhavati, bhikṣavaḥ, sa samayo yad ayaṃ lokaḥ saṃvartate . saṃvartamāne loke yadbhūyasā sattvā 'ābhāsvare devanikāya upapadyante . te tatra bhavanti rūpiṇo manomayā avikalā ahīnendriyāḥ sarvāṅgapratyaṅgopetāḥ śubhāvarṇasthāyino[5] svayaṃprabhā vihāyasaṃgamāḥ prītibhakṣāḥ prītyāhā[rā] dī[383A]rghāyuṣo dīrgham adhvānaṃ tiṣṭhanti . bhavati, bhikṣavaḥ, sa samayo yad ayaṃ loko vivartate . vivartamāne loke, ākāśe śūnyaṃ brāhmaṃ vimānam abhinirvartate . athānyataraḥ sattva, āyuḥkṣayāt puṇyakṣayāt karmakṣayād, ābhāsvarād devanikāyāc cyutvā śūnye brāhme vimāna upapadyate . sa tatraikāky advitīyo 'nupasthāpako dīrghāyur dīrgham adhvānaṃ tiṣṭhati . atha tasya sattvasya dīrghasyādhvano 'tyayā[t] tṛṣṇotpannā, aratiḥ saṃjātā : aho vatānye 'pi sattvā ihopapadyeran mama sabhāgatāyām . evaṃ ca tasya sattvasya cetaḥpraṇidhir, anye ca sattvā āyuḥkṣayāt puṇyakṣayāt karmakṣayād ābhāsvarād devanikāyāc cyutvā tasya sattvasya sabhāgatāyām utpannāḥ . atha tasya sattvasyaitad abhavad[6] : " aham asmy ekāky advitīyo 'nupasthāpako dīrghāyur *yāvad*

[1] On the heretical views concerning the *pūrvānta* and the *aparānta* (former births, births to come), see the ŚĀLISTAMBA and the MADHYAMAKAVṚTTI, ch. XXVII.
[2] Dīgha, I, p. 13. 11 et 14. 21.
[3] *Sic.*
[4] Dīgha, I, p. 17. 17.
[5] *Sic.*
[6] *Sic.*

anye 'pi sattvā ihopapadyeran mama sabhāgatāyām; evaṃ cetaḥpraṇidhir ime ca sattvā ihopapannā mama sabhāgatāyām. mayaite sattvā nirmitāḥ, aham eṣāṃ sattvānām īśvaraḥ kartā nirmātā sraṣṭā sṛjaḥ (?) pitṛbhūto bhāvānām" iti. teṣām api sattvānām evaṃ bhavati: "imaṃ vayaṃ sattvam adrākṣma[1] ekākinam advitīyam anupasthāpakaṃ dīrghāyuṣaṃ dīrgham adhvānam tiṣṭhantam. tasyāsya sattvasya dīrghasyādhvano 'tyayāt tṛṣṇotpannā aratiḥ saṃjātā: aho vatānye 'pi sattvā ihopapadyeran mama sabhāgatāyām; evaṁ cāsya sattvasya cetasaḥ praṇidhir, vayaṁ cehopapannā asya sattvasya sabhāgatāyām; anena vayaṃ sattvena nirmitāḥ; eṣo 'smākaṃ sattva īśvaro *yāvat* pitṛbhūto bhāvānām". athānyataraḥ sattva āyuḥkṣayāt puṇyakṣayāt karmakṣayāt tasmāt sthānāc cyutvā teṣām i[383B]tthaṁtvam āgacchati manuṣyāṇāṃ sabhāgatāyām; sadvṛddher[2] anvayād, indriyāṇāṃ-paripakāt, keśaśmaśrūṇy avatārya, kāṣāyāṇi vastrāṇy ācchādya, samyag eva śraddhayā agārād anagārikāṃ pravrajyāṃ pravrajati. so 'raṇyagato vā vṛkṣamūlagato vā *vistareṇa yāvat* tadrūpaṃ śāntaṃ cetaḥsamādhiṃ spṛśati, yathā samāhite citte pūrvakam ātmabhāvam anusmarati. tasyaivaṃ bhavati: "yo 'sau brahmā yena vayaṃ nirmitāḥ sa nityo dhruvaḥ śaśvato 'vipariṇāmadharmā, ye tu vayaṃ tena brahmaṇā nirmitās, te vayam anityā adhruvā aśāśvatā vipariṇāmadharmāṇa" iti.

tadevaṃ kāmadhātur api tayāntagrāhadṛṣṭyālambito bhavati, ataḥ kāmadhātvālambanānāṃ dṛṣṭīnāṃ samudācāra uktaḥ.

tathā tatraiva Brahmajālasūtre ahetusamutpattikānāṃ pūrvāntakalp[ak]ānām iti prakṛtaṃ vītarāgāṇāṃ kāmadhātvālambanānāṃ dṛṣṭīnāṃ samudācāra uktaḥ. katham[3] santi rūpadhātāv asaṃjñisattvā nāma devāḥ. saṃjñotpādāt teṣāṃ sattvānāṃ tasmāt sthānāc cyutir bhavati. anyatamaḥ[4] sattvas tasmāt sthānāc cyutvā itthaṁtvam āgacchati manuṣyāṇām sabhāgatāyām. *pūrvavad yāvat* pūrvakam ātmabhāvaṃ samanusmarati. tasyaivaṃ bhavati: "ahetusamutpanna ātmā

[1] MS. ādrākṣme.
[2] *Sic* MS.
[3] Dīgha, I, p. 28. 25.
[4] MS. anyathātamaḥ.

lokaś ca." tad anenaivam evaṃ bhavaty: "ahetusamutpann[a] ātmā lokaś cā, 'ham asmi, pūrvāṃ nābhūvam, so 'smy etarhi saṃbhūta ity ahetusamutpanna ātmā lokaś ce" 'ty *evam ātmānaṃ lokaṃ cālambamānas tayā mithyādṛṣṭyā kāmadhātum apy ālambata ity eteṣāṃ kāmadhātvālambanānāṃ dṛṣṭīnāṃ samudācāra uktaḥ.*

Yours faithfully,

LOUIS DE LA VALLÉE POUSSIN.

[So far as our present information enables us to judge, it seems certain that neither the Pāli Pitakas as a whole, nor any one of the separate books, were ever translated into Sanskrit. When the Indians began to use Sanskrit as their literary language, from the second century A.D. onwards, the people we call Buddhists gave up composing or writing in Pāli, though they probably still understood it. But the books they then wrote, in Sanskrit, were new ones. No translation of any Pitaka book is ever mentioned, and no MS. of such a translation has been discovered. It would seem possible, however, from the above very interesting extracts that a Sanskrit work based on the Brahmajāla Suttanta, and called the Brahmajāla Sūtra, was extant when the Abhidharma Koṣa Vyākhyā was written. The other alternative—viz., that the quotations are from the Pāli, and merely put into Sanskrit at the time—seems to be shut out by the considerable differences between the Pāli text and the quotations. That such isolated stories or episodes, or passages, out of a Pitaka book were re-written in Sanskrit, is confirmed by the analogous instance of the Sakka Pañha Suttanta. We have in the Mahāvastu, 1. 350, a quotation from an old sūtra introduced by the words *yathoktaṃ bhagavatā Śakrapraśneshu.* This quotation corresponds fairly well to a passage in the Suttanta, but has been altered and amplified. It is evident that it is not made from the Pāli. And the most probable hypothesis seems to be that this old and popular story had been re-written in Sanskrit before the time of the Mahāvastu. It is much to be desired that the publication of the Sanskrit Buddhist texts, from which

alone we can hope to obtain a definite conclusion on this and on so many other points of historical interest, will not be longer delayed. And meanwhile we have to thank M. de la Vallée Poussin for his constant work in this direction, and for his present very striking discovery.—RH. D.]

3. SLEEMAN'S "PY-KHAN"—KĀLIDĀSA AND THE GUPTAS.

Rathfarnham, Camberley, Surrey.
January 30th, 1903.

DEAR PROFESSOR RHYS DAVIDS,—On p. 186 of the January number of the Journal, Mr. Burn follows Mr. Vincent Smith in connecting Sleeman's "*Py-khan*, or a conversion of living beings into stone by the gods," with the verb *pēkhnā*. I think that this derivation is very doubtful. The word *py-khan* is almost certainly Sleeman's attempt at writing *pāṣāṇa*, a stone. The compound *pāṣāṇa-mūrti* is quite common in the meaning of a stone image. *Pāṣāṇa* is pronounced *pākhān* all over Northern India. Hence Sleeman's spelling.

On pp. 183 ff. of the same number of the Journal, Mr. Monmohan Chakravarti gives several reasons for believing that Kālidāsa lived under the Gupta dynasty. As a very small contribution to the discussion, may I point out the poet's somewhat remarkable employment of the root *gup* in the 21st verse of the first canto of the Raghuvaṁśa. Kālidāsa is describing his hero Dilīpa, and says "*jugopātmānamatrasto*," or, as Count von Bülow said the other day, he played the rôle of the strong, still man who, without weakness, but also without provocation, protects himself and his property. If Kālidāsa did live under the Guptas, the line would have been a subtle compliment to his patrons.—Yours very sincerely,

GEORGE A. GRIERSON.

4. The Vajracchedikā.

8, *Northmoor Road, Oxford.*
February 1st, 1903.

Dear Professor Rhys Davids,—With reference to the remarks on pp. 113–114 of the January number of your Journal, it will interest 'Mahāyānist' students to learn that among Dr. Stein's manuscript fragments I have discovered portions of the *Vajracchedikā*. The text of the leaf shown in plate v of Dr. Stein's "Preliminary Report" will be found in Professor Max Müller's edition of that work, in the Anecdota Oxoniensia, Aryan Section, vol. i, pt. 1, p. 41. The obverse commences with *sarva-satvā sarva-satvā iti*, occurring on line 8 of the print (where *sarva* is omitted), and ends with *kuçalā dharmā kuçalā dharmā iti* on line 19. The reverse commences with *[adha]rmā c'eva te Tathāgatena* on line 20 of p. 41, and ends with *Tathā[gatasya]* on line 12 of p. 42 of the print. The leaf, it will thus be seen, is only very slightly defective: only six akṣaras are lost on the last (or sixth) line of the obverse.

The manuscript apparently consisted of 20 leaves, of which 15 are more or less completely preserved. The following five are entirely missing: 1, 3, 4, 5, 12. The leaves are numbered on the obverse pages, not (as usual in Northern Indian *pothīs*) on the reverse.

The text, on the whole, agrees very well with the printed edition; but it appears to reflect more nearly the Japanese recension of the work. At least, the passage peculiar to the latter, mentioned in footnote 1 on p. 46 of the print, is found in Dr. Stein's manuscript.

The end of the work, much as given in the print, stands on the reverse of the 19th leaf, where, on line 4, it reads: *sa-deva-gandharva-manuṣ'āsuraç=ca loko Bhagavato bhāṣitām=abhyanandur (sic) = iti ‖ āddhyaṣṭama* (here about 8 or 9 akṣaras are lost at the end of the 4th line); then, on line 5, *[vajracchedi]kā prajñāpāramitā [samāpt]ā*. A portion of the lost akṣaras must have contained the name *[Vajracchedi]kā*.

After *samāptā* on the 5th line of the 19th leaf there follows a short text, which is very imperfectly preserved. It commences: *siddhi . . . ya saha bhartari nandi-balena saha pitṛṇā* . . . . It is continued on the obverse of the 20th leaf, which is very fragmentary, and it concludes on the 2nd line of the reverse of that leaf: [*ma*]*hārājāna sa-deva-mānuṣ'āsura-gardharvbaç=ca loko Bhagavato bhāṣitam=abhya-nanda* (here a long lacuna); line 3, *nāma mahāyāna-sūtraṁ samāptam* ‖○‖ *Namo Akṣaya-ma* . . ; here follows a long string of salutations, imperfectly legible, which fills up the rest of the reverse of the 20th leaf. The number of this leaf is missing, and, of course, it is possible that it is a higher-numbered leaf. But this does not seem probable, for what is legible of the text seems to contain not much more than an advice regarding the spiritual advantage of writing, reading, and mastering (*paryavāp*) the sūtra.

The passages, quoted in Professor Bendall's edition of the Sikṣā Samuccaya, pp. 171 and 275, occur in the manuscript on fols. 2 (rev.) and 11 (obv.).

I may note two curiosities of spelling. On fol. 19, line 4, we have *adhimocyitavyā* (for *adhimoktavyā* of the print, p. 45, ll. 15–16). Again, *vyūha* is three times spelled *viyūbhā* on fol. 13, ll. 5 and 6, and once *viyūhā* on fol. 10, line 5, in either case as feminine.—Yours sincerely,

A. F. Rudolf Hoernle.

5. Heine and Persian Poetry.

London.
February 16th, 1903.

Dear Sir,—Every reader of *Das Buch der Lieder* knows the beautiful lines of Heine—

"Aus meinen Thränen spriessen
Viel blühende Blumen hervor,
Und meine Seufzer werden
Ein Nachtigallenchor";

but I am not aware if anyone has noticed the striking resemblance between the *Lyrisches Intermezzo* (v) and the following lines of a Persian poet:—

بهار عکس رویش در چمن جوشے زد و گُل شد
فغان از سینه ام برخاست شکلے بست و بُلبُل شد
زآتش گاه سوز سینه ام دُودے بُرون آمه
به اِمداد صبا گرد رخش پیچید و گاگُل شُد
به تعظیم سوارلافتی ماه فلک پیما
زبد ریت بد رشد پشت خم شد نعل دُلدل شد

"The glamour of the reflection of her face thrilled in the garden and became a Rose;
A cry burst from my lips, assumed a form, and became a Bulbul (Nightingale);
From the fireplace of my flaming heart ascended a column of smoke,
Wreathed round her face with the aid of the breeze and became ringlets;
In honour of the cavalier, 'No chivalrous knight like him,' the heaven-traversing Moon,
Mooned out of full-moonhood, bowed her back, became the shoe of the Duldul."

Heine's Jewish origin, his taste for Oriental literature, and the fact that some of the gems of Sanskrit lyrics had inspired his genius to produce *Die Lotusblume*, *Auf Flügeln des Gesanges*, etc., make it probable that these Persian lines were not unknown to him. I could not trace these lines to their author. I found them in a commonplace-book (بیاض) of my cousin, Mr. Z. R. Zâhid Sohraworthy, M.A., M.R.A.S., transcribed below a ghazal of Iraki's. The allusion to the سوارلافتی ('Ali عم) and his charger (Duldul) shows the author to be a Shi'ite, though a Sunnite may as well have expressed a similar sentiment.

"Je ne suis pas la rose, mais j'ai vécu avec elle."

This saying is assigned to H. B. Constant (1767–1830) by A. Hayard in his Introduction to the "Autobiography and Letters" of Mrs. Piozzi. To me it seems to be a paraphrase or recollection of the following lines of Sadi:—

گِل خو شبوی در حمام روزے * رسید از دست محبوبے بدستم
بد و گفتم که مشکی یا عبیری * که از بوئ دل آویزے تومستم
بگفتہ گِل من اَن ناچیز هستم * ولیکن مدتے با گُل نشستم
جمال همنشین در من اثرکرد * وگرنه من همان خاکم که هستم

Yours truly,

ABDULLAH AL-MÂMOON SOHRAWORTHY.

To Professor Rhys Davids,
Secretary, Royal Asiatic Society.

6. RĀMAGĀMA TO KUSINĀRĀ.

DEAR PROFESSOR RHYS DAVIDS,—The testimony of the Chinese pilgrims Fa-hian and Yuan Chwang, when taken along with other available data, leads me to believe that several of the Buddhist places of note in the countries to the south of the Kapilavastu country are well known, but have not been recognized, although many of them are described in Cunningham's Archæological Survey Reports (A.S.R.).

Bhuilā-dīh and the stūpa to the east of Jaitapura (A.S.R., xii, pl. x) correspond to the sites of the ancient capital of the Rāma country, and to the famous Rāmagrāma stūpa; and either Bhankarī-dīh or Bāwarpāra-dīh, to the Śrāmaṇera monastery.

Rāmapura Deoriyā (A.S.R., xxii, pl. ii) represents the village named Rāma to which Caṇḍaka was sent in advance from Kapilavastu when Gautama was about to leave home to become an ascetic. Korowa-dīh corresponds to Maṇiyā (Maṇikā); and the stūpas of Caṇḍaka's Return, Cut Hair, and Changed Garments to the stūpa-sites extending from the village named Caṇḍuā eastwards along the northern edge of the Harnāyā Tāla.

Bhadāra (Mon. Antiq., N.W.P., p. 241) is the site of the city of the Moriyās and of the Ashes stūpa; while Gopālpura (op. cit., p. 242; Proc. A.S. Bengal, 1896, p. 99) is the village of the learned brahmin spoken of by Yuan Chwang.

Kusinārā, where Gautama Buddha died, is represented by the Updhauliyā-Rājadhānī remains (A.S.R., xviii, pl. iii).

The detailed evidence in support of these and other connected identifications, such as the unity of the Anomā River with the Vāṇa Gaṅga or Rangili-Rasāḍhī Nālā (A.S.R., xxii, pl. ii), will be filled in, and at no very distant date be ready for examination and criticism.—Yours sincerely,

W. Vost.

Jaunpur.
February 2, 1903.

7. Ceylon and Chinese.

Dear Sir,—Among those men who shared in the propagation of Buddhism and in the translations of its scriptures in China there were some who took the sea-route between India and China. Some facts narrated about these men may be interesting, both for the history of navigation, and for the light they throw upon the relations of Chinese Buddhism with Ceylon. The following extracts are made from the Kwai-Yuen Catalogue of the Chinese Tripiṭaka, compiled in 730 A.D.

The first Buddhist who succeeded in finishing a sea journey from Ceylon to China was Fa-Hien. But a little before him an Indian called Buddhabhadra arrived in China in 398, i.e. two years before Fa-Hien entered India. Buddhabhadra was a descendant of the Śākya Prince Amitodana, and was born in Nāgarī (?那 柯 梨 城). He travelled through Northern India and Indo-China, and embarked from Cochin for China. After him there was a series of the Buddhists who sailed between Southern India and China.

Saṅghavarmī (?僧 伽 跋 彌), a Ceylonese and the translator of the Mahīśāsaka Vinaya, arrived in China in

420. In 424 Guṇavarman, grandson of an ex-king of Kabul, arrived at the capital of the Sung Dynasty. He had sailed from Ceylon and visited Java (闍婆) on the way. The arrival of a number of Ceylonese nuns in 434, under the leadership of a certain Tissarā (or Tessarā, 鐵薩羅), is probably connected with Guṇavarman's work for the foundation of the monastic system in China after the model of Ceylonese Buddhism. And, again, in 438 another group of eight Bhikkhuṇīs came from Ceylon. The texts translated by Guṇavarman were nearly all Vinaya texts, ten out of eleven. Saṅghavarman, who had come to China by the overland route, sailed from the southern coast of China for India in 442. Guṇabhadra, the translator of the Saṁyukta-āgama,[1] arrived at the province Kan in 435. Though he was born in Central India, he came to China from Ceylon. A Chinese Buddhist called Dharmakrama (?曇無竭), of the Lī family, took the sea-route in 453 on the way back to China from Southern India. Saṅghabhadra, who was born in a "western country," but was educated in Ceylon, came to China with his teacher, a Tripiṭaka-ācārya.[2] In 488 Saṅghabhadra translated Buddhaghosa's Samantapāsadikā.

In the sixth century we have only one instance of a sea journey. In 548 Paramati, also called Kulanata (拘羅那他), was invited by the Emperor Wu of the Liau Dynasty, and arrived on the southern coast. The place where he embarked for China is not mentioned, but the fact that he later expressed the wish to go back to Laṅkā shows that he knew Ceylon. We owe to him the translations of many works of Asaṅga and Vasubandhu, of Sāṁkhya-kārikā, and also of some Abhidharmas. Paramati was born in Ujjainī.

In the seventh century we have two instances of sea journeys. Puṇyna-upacaya (?布如烏伐耶), born in Central India, came to China from Ceylon in 655.

[1] The MS. from which the translation was made was brought by Fa-Hien from Ceylon.

[2] The name of this Ācārya is unknown. Professor Takakusu's conjecture that he might have been Buddhaghosa requires further research.

Jñānabhadra, a Buddhist from Palyan (? 波 凄), of the "Southern Ocean," came to China for the second time, after having visited India from China by sea.

The last of the series in our Catalogue is Vajrabodhi, who came to China by sea and entered the capital in 720. He was born in Malaya, which is the name of the mountainous district in the south of Ceylon, but is also used for a similar district in South India. He translated many Mantra texts, and became the founder of mystical Buddhism in China.

M. ANESAKI.

Benares, Feb. 3, 1903.

8. JAHĀNGĪR'S AUTOGRAPH.

With reference to Mr. Wollaston's article in the Journal for 1900, pp. 69–73, I beg to call attention to an admitted autograph of the Emperor Jahāngīr. It is shown on a plate opposite p. 271 of the Journal of the Asiatic Society of Bengal, vol. xxxix (1870), pt. 1. There is considerable resemblance between this writing and that under the portrait opposite p. 114 of vol. i of Mr. W. Foster's "Embassy of Sir Thomas Roe." The result is, I think, to confirm Mr. Wollaston's verdict (which I had arrived at independently) that the writing under the portrait is an autograph of the Emperor Jahāngīr.

WM. IRVINE.

February 11, 1903.

9. THE AVESTIC LIGATURE FOR *hm*.

SIR,—When consulting certain Avestic texts some time ago, I noticed the great resemblance which the Avesta sign for *hm* has to the Brāhmī conjunct both in form and in pronunciation. I do not know if this has been pointed out before. If not, it will, perhaps, be of interest to draw attention to the fact that this resemblance affords additional

support to the supposition that the original value of the compound letter is not *mha*, but *hma*, as advocated in my note on the subject in the Journal for 1901, pp. 301-305.

A striking proof of it is afforded by the word *ahmākəm* (gen. plur. of *azəm*), which is equivalent to Pāli *amhākaṁ*. In the well-known Bodleian MS. of the Avesta (J. 2), dated 1323 A.D., it is written with the conjunct (Yasna 15. 2), as would be the case if it were written in the Brāhmī script. In the Bod. Zend-Sanskrit MS. J. 3, of equal antiquity, as well as in five other MSS. which Professor Mills has been so kind as to show me, this conjunct is used for *hm* side by side with its full form . Professor Spiegel has reproduced the ligature in his edition of the Avesta, whilst Professor Geldner has rejected it in his well-known edition of the same work, because he found "whole classes of manuscripts, especially the Persian, make no use of this character" (Prol., p. li).

DON M. DE Z. WICKREMASINGHE.

Indian Institute, Oxford.
February 28, 1903.

10. THE KUSHĀN PERIOD.

DEAR PROFESSOR RHYS DAVIDS, — When I announced (*Journal*, January, 1902, p. 175) my discovery of an apparently satisfactory solution of the Kushān chronological problem by interpreting the dates below 100 in terms of the Laukika era, and subsequently developed my views at length (*Journal*, January, 1903), I was under the impression that the theory propounded was altogether novel. But there is nothing new under the sun. A friend reminds me that my theory had been tentatively suggested by Mr. Growse in 1883 ("Mathurā," 3rd ed., p. 114). Mr. Growse's words are :—

"The Seleucidan era is obviously one that might have recommended itself to a dynasty of mixed Greek descent; but another that might with equal or even greater probability have been

employed is the Kashmirian era used by Kalhana in the last three books of his Rájá-Taranginí, and which is still familiar to the Bráhmans of that country. It is otherwise called the era of the Saptarshis, and dates from the secular procession of Ursa Major, Chaitra sudi I of the 26th year of the Kali-yuga, 3076 B.C. It is known to be a fact, and is not a mere hypothesis, that when this era is used the hundreds are generally omitted.

"The chronological difficulties involved in these inscriptions seem, therefore, almost to defy solution; for the era may commence either in March, 3076 B.C., or in October, 312 B.C., or in 57 B.C., or in 78 A.D."

This passage in Mr. Growse's book had completely escaped my recollection. I now take the earliest opportunity of acknowledging that the first hint of the true solution of the difficulty was given by the late Mr. Growse.

VINCENT A. SMITH.

Gwynfa, Cheltenham.
March 21, 1903.

NOTICES OF BOOKS.

Die Reden Gotamo Buddho's aus der mittleren Sammlung Majjhimanikāya des Pāli-Kanons. Zum ersten Mal übersetzt von Karl Eugen Neumann. (Zweiter Band, 1900; Dritter Band, 1902.)

The first volume of Dr. Neumann's translation of the Majjhimanikāya has been reviewed by me in this Journal for 1897, p. 133 seq. The second volume came out in 1900, and the third and last in 1902. Of the Pāli text the first seventy-five suttas were published by Trenckner in 1888, Suttas 76–91 by Chalmers in 1896, and the rest also by Chalmers in 1900. Besides there is the edition of the King of Siam in Siamese characters, which has been consulted by Neumann in all difficult passages.

On the whole, the remarks which I have made with regard to the first volume of Neumann's translation hold good also for the second and third. In one respect an improvement may be acknowledged. The notes are more interesting in the last volumes. Dr. Neumann seems to have devoted himself in the meanwhile to the study, not only of Vedic texts, chiefly the Upanishads, but also of mediæval mysticism, and he gives us a lot of information on these two points in the notes as well as in the prefaces to the second and third volumes.

Of course, I cannot be expected to enter into details in this short review. I will only say a few words about the Bakkulasutta (No. 124) and the Lomasakaṅgiyasutta (No. 134).

The Bakkulasutta is a discourse between the venerable Bakkula, who had entered the order at 80 years of age, and the naked ascetic Kassapa. The result of the discourse is the reception of Kassapa into the Buddhist community.

Bakkula is mentioned in the Anguttaranikāya, i, 14, 4, as chief in the matter of bodily health (*appābādha*). He is the 396th in the list of the theras in the Apadāna, where we find the story of his curing the Buddha Anomadassī. In the Theragāthā the verses 225–227 are ascribed to him. Neumann, in his translation of this passage ("Die Lieder der Mönche und Nonnen Gotamo Buddho's," p. 63), gives a curious derivation of the name Bākula from a Pāli word *bakuras* or *bākuras*, which does not occur in the dictionaries. The true derivation of the name Bākula or Bakkula is either from *vyākula* (Morris, Journal of the Pāli Text Society, 1886, p. 98) or from *dvākula*, 'the two-family one,' and on the latter the legend of his present birth is based. During his childhood his mother took him to the river Yamunā to bathe, when a huge fish swallowed him. The fish was caught at Benares, and on being cut open the babe was found in it unhurt. The mother heard of the manner in which he had been preserved, went to Benares, and claimed him. Thereupon an interesting lawsuit arose; and the king, thinking it unjust to deprive the purchaser of a fish of anything inside it, and also unjust to deprive a mother of her child, decided that the child belonged equally to both. So he became the heir of both families, and was therefore called Bakkula (Visaddhimagga in Journal of the Pāli Text Society, 1891–3, p. 112; Spence Hardy, Manual of Buddhism, p. 520; Milindapañha, transl. by Rhys Davids, ii, 11).

In the Bakkulasutta no allusion is made to this legend, which must be of later origin, nor of his curing, in a former existence, the Buddha Anomadassī of the disease he was suffering from, viz., wind in the stomach (*vātābādha*), as stated in the Apadāna and Milindapañha. The whole sutta is about Bakkula's abstinence from all sorts of transgressions, partly allowed and partly not allowed,[1] in which the priests of that time used to indulge. The word *gaddūhanamattaṃ* on p. 127, l. 2, is a difficult one. Neumann translates it

[1] According to the rules in the Vinaya.

"und wäre es auch nur ein Hustenreiz in der Gurgel gewesen," and connects it with *gaddulabandho*, "ein Hund mit einem Kehlbande" (vol. iii, p. 28). This is certainly wrong. Supposing that a word *gaddu*, 'throat,' exists, which is by no means sure, we meet in *gaddulabandho*, not with this word, but with *gaddula*, 'chain.' Trenckner's derivation from Skt. *dadrughna* (Pāli Miscellany, p. 59) is also wrong, and so is the one which the native commentators propose, viz., from *go*, 'cow,' and *duh*, 'to milk.' The word remains a crux. Perhaps *gadda* stands for *gaddha* = *gṛidhra*, 'a vulture.' The second part, *ūhana*, could be derived from *ūh*, and the whole would mean 'the setting of a vulture,' which might signify 'a short moment.' We gather from the expression *gaddhābādhī* in Cullavagga, i, 32, and Buddhaghosa's commentary to this passage, that the Indians used vultures instead of dogs in hunting hares and foxes (see Sacred Books, vol. xvii, p. 377, note).

The Lomasakaṅgiyabhaddekarattasuttaṃ is the last of the four Bhaddekarattasuttas, which all contain the stanzas "Atītaṃ nānvāgameyya," etc. Neumann reads the 8th half-çloka with the Siamese edition, "Taṃ viddhā-m-anubrūhaye," and translates, "Durchbohrend finden kann man das." I do not understand which form of *vijjhati* this *viddhā* should be, and the meaning 'to piece, to perforate' is not at all suitable. If, on the contrary, we read with Chalmers *vidvā*, we get a much better sense: "Was keiner rauben, rütteln kann, das findend möge er es wachsen lassen." In the following half-çloka there is also a mistake; instead of *ajj'eva kiccaṃ ātappaṃ* we ought to read *ajj'eva kiccaṃ kātabbaṃ*, "Was zu thun ist muss *heute* gethan werden." This is, in fact, the reading of the corresponding passage in the Apadāna (fol. the[b]).

Lomasakaṅgiya is the 548th in the list of the theras of the Apadāna, and in the Theragāthā verse 27 is ascribed to him—

> "Dabbaṃ kusaṃ poṭakilaṃ usīramuñjapabbajaṃ
> Urasā panudahissāmi vivekaṃ anubrūhayaṃ."

According to the Apadāna, the first interview between Lomasakaṅgiya and the devaputta Candana took place at the time of the Buddha Kassapa. Afterwards Candana was reborn in the Tāvatiṃsa-heaven and Lomasakaṅgiya at Kapilavatthu in the Sākya family, to which the Buddha belonged. In this existence they met again, and at this second interview Candana[1] uttered to Lomasakaṅgiya the verses "Atītaṃ nānvāgameyya," etc.

I close this short review with my best thanks to Dr. Neumann for the good and solid work he has given us in his translation of the Majjhimanikāya.

E. MÜLLER.

Berne, New Year, 1903.

APOLLONIUS OF TYANA. By G. R. S. MEAD, B.A. (London and Benares: Theosophical Publishing Society.)

Apollonius of Tyana is a subject of perennial interest. For the benefit of the uninitiated we may premise that he lived in the first century A.D., traversed the world, according to his biographer, from Cadiz to the Hydaspes, learned all the wisdom of the Indians, wrought many miracles, and died under Nerva or Trajan. In the second decade of the third century A.D. Philostratus, an Athenian Professor of rhetoric, wrote his biography, which biography becoming popular, the renegade Hierocles, governor of Bithynia under Diocletian, brought forward as a rival to the history of our Lord. The echoes of the secular controversy started by Hierocles have scarcely died away; it is indeed universally admitted that Philostratus did not intentionally borrow from the Gospel history, but some still hold by Baur's hypothesis that, Christianity being in the air, Philostratus was inspired by Gospel stories he had vaguely heard. Into that controversy we do not propose to enter. One or two

[1] Candana has nothing to do with *candra*, 'moon,' as Neumann suggests in the note on p. 379. It means 'the sandal-tree,' and is frequently used as a proper name alone and in compositions. The northern Buddhists have a Buddha of this name (Avadānaçataka, transl. by L. Feer, p. 64) and a pratyekabuddha (ib., p. 93).

of the *logia* may have found their way into the book, but any other connection with Christianity, direct or indirect, we utterly disbelieve.

The value of Philostratus' work is twofold. It is a mine of folklore, and of folklore then for the first time recorded, but since then universally diffused. The God who appears at the conception of Apollonius, the swans which herald his birth, the Brahmans who rise into the air to pray, their acropolis surrounded by clouds which collect and dissolve at their bidding, the fatal loadstone, the monkeys who throw down the pepper, the plague which stalks through Ephesus in the disguise of an aged beggar, and turns into a black dog, the creter of pardon, the brimful cup of Tantalus, the unfailing cask which holds the rains,—these and a hundred other marvels of Greek or Eastern folklore may be read here for the first time, or if not original, still greatly improved.

And, secondly, the book is the chief monument of religious thought among the Pagans in the time of the Severi. Its declared object is to set forth the ideal philosopher, the true theosophist and friend of the gods, the new Pythagoras. The nature of the gods, their relations to men, occult science and magic, sacrifice and divination, the moral law and the duties of the Emperor, Philostratus discusses each and all.

But behind this romance and this philosophy there lies the enigma of Apollonius himself. And it is this which interests Apollonius' latest biographer, Mr. Mead. Now Mr. Mead's works are always worth the reading. They are characterised by clearness, sanity, and moderation; they are scholarly, and are always conceived in a profoundly religious spirit. The bibliographies are excellent. With Mr. Mead's workmanship we have only one fault to find. In order to give elevation to the utterances of his hero, he not only affects poetical expressions—which is permissible—and poetical inversions of speech—which are not permissible—but he indulges in a whole page of irregular blank verse. Page 121 is an instance in point. Mr. Mead is master of an excellent prose style, and Pegasus is a sorry hack when Pegasus goes lame.

And now we come to the question, what manner of man was this Apollonius? Was he a vulgar magician and impostor, or was he a man of wondrous virtue, or is there some middle term between the two? Philostratus and Mr. Mead have no doubt about the answer. For them Apollonius is the preacher of a large and gracious philosophy, a politician whose sympathies embraced humanity, a staunch upholder of the monarchy of the Cæsars, no rabid republican like his quondam friend Euphrates, a reformer of religions, looking benignly upon all sects, and imparting to them something of his own elevation. And all this he does in virtue of the hidden wisdom of the immemorial East, the wisdom which he learned from the Indian gymnosophists, whereby he has become the possessor of a divine insight, and speaks with the authority of an occult, if not a superhuman power. In short, Mr. Mead accepts Philostratus' biography as genuine history, after deducting what is obviously fabulous and incredible. This were an easy method, but it is hardly a convincing one. It is the rationalist's peculiar privilege, or pravity, to elect and reject his facts at will; and that is a title which Mr. Mead would abhor. If we are to get at Apollonius we must get behind Philostratus. It is possible to do so, because Philostratus has given us his authorities, and because Apollonius is mentioned by authors anterior to Philostratus. But before we make the attempt it will be well to explain the circumstances under which the cult of Apollonius arose. Philostratus had nothing to do with *that*.

It was the Dowager Empress Julia Domna who first brought the cult of Apollonius into fashion. She was a Syrian by birth and training, and like all her family Syrian to the core. Apollonius was a Greek, but a Greek of a family which had lived for generations in Tyana of Cappadocia, a country town of the White Syrians, a family therefore distinguishable from its neighbours only by its pedigree and its pride of Hellenism. Apollonius must have been saturated from his childhood with Syrian modes of thought, and his chief distinction was the Oriental character

he gave to the vagrant Greek philosopher. In his time he attained considerable fame as a wandering fakir and thaumaturge, and after his death a local cult appears to have sprung up of this strange figure. Here were all the elements required to fascinate the religious imagination of the Syrian Empress. Her stepson the Emperor Caracalla, over whom her influence was great, erected a temple in Apollonius' honour, and by her command Philostratus wrote his biography. Philostratus was much more careful about Attic phrasing and dramatic effect than about solid facts: he was engaged to write a panegyric, and he had one eye on the schools at Athens, the Papal seat of Pagan philosophy, the other was turned to the Court of the Empress, where religious discussion was as daily bread. The result was a memorable philosophic romance, full of marvels and of folklore, but at the same time an embodiment of a lofty religious philosophy, the outcome of two centuries of religious speculation. We have first to get at the residuum of historical fact which lies at the bottom of the romance, and secondly to distinguish Apollonius' teaching from Philostratus' accretions.

The romance of the story was not due to Philostratus at all; it was supplied him. Three biographies already existed of the hero; and besides these Philostratus had got certain things from local tradition. He had also utilised one or more works ascribed to Apollonius, as well as a collection of letters, of which only some were genuine. The previously existing biographies were written, the one by Maximus, the second by Moeragenes, and the third by a certain Damis. The work of Maximus dealt only with the early life of Apollonius at Aegae, and it is noteworthy that this part of Philostratus' work is practically free from the marvellous. We may take it for historical. The fuller biography of Moeragenes was not to Philostratus' liking, for reasons we shall presently see, and he pooh-poohs it. His chief authority is the narrative of Damis, and much of the philosophic teaching is conveyed in Socratic dialogues between Damis and Apollonius. This Damis is said to

have been an Assyrian of Nineveh who accompanied Apollonius on his travels, but his memoirs were jotted down in a rude and unlettered style, and their existence remained unknown until a descendant produced them in answer to the inquiries of the Empress. They were probably a farrago of wild legends and obscure sayings, such as passes muster in India for the life of a Gorakhnath or a Kabir. Historical value these memoirs have none, but they are the basis of much of the folklore and most of the marvels. Philostratus cannot have got much from local tradition after a hundred years of neglect, and he makes little use of his other sources of information—the letters and the writings. From the latter he gives scarcely a quotation; he quotes several of the letters, but rather to illustrate the style than the opinions of the man. If we expunge every passage in which Damis bears a part, and everything that is borrowed from Ctesias, the Companions of Alexander, and other well-known story-tellers, i.e. if we expunge three-quarters of the volume, we get a residuum which we may perhaps allow to be true, at least when it is confirmed by the notices of other writers.

Of these the earliest is Lucian. Lucian, a Syro-Greek himself, must often have heard of Apollonius, and he declares the impostor Alexander of Abonoteichos to be his spiritual descendant; his master was a Tyanean, one "of the companions of Apollonius the Tyanean, and acquainted with all his 'tragedy,'" or tragic style. Lucian is hardly a fair witness, but the reference here is obvious, and is amply borne out by Philostratus. Apollonius marches from town to town surrounded by disciples; he dwells in the temples; his figure is meagre, his looks are ascetic, his dress magnificent and striking, his long hair gives him a strange dignity, when he speaks it is like an oracle; from time to time he vanishes incomprehensibly. An air of mystery surrounds the man, 'tragic' pomp and dramatic accompaniments are his stage properties; in outward appearance he is the parallel, not of Pythagoras, but of the Indian fakir resplendent in peacocks' feathers, miscellaneous costume,

and white Berlin gloves, who sits wrapped in silent meditation on the Ganges' bank or on the temple platforms of Hurdwar.

So far the appearance of the man. Apuleius and Moeragenes bear witness to his repute as a magician. Apuleius ranks him with the most famous. Moeragenes, if we may judge from the reference in Origen, represented magic as a leading characteristic of his hero. And this was undoubtedly the popular view. Philostratus, while declaiming against magic, abounds in examples. Some of these are ordinary instances of second sight, and the most famous one, in which Apollonius describes the murder of Domitian at the very time it happened, is vouched for by Dio Cassius. Second sight and mesmeric powers Apollonius probably possessed; but what shall we say of tricks like those of the Davenport brothers, when he puts off and on his chains at will, or causes the letters of the indictment against him to disappear, or vanishes from before the Emperor's judgment-seat in Rome to reappear the same day at Puteoli? According to Philostratus he was tried before Domitian for his dress, his manner of life, and his magical practices, and these charges sum up the popular impression of the man and all that the public cared to know of him.

But there was undoubtedly a nobler side. Eusebius (Praep., Evang. iv, c. 13) has preserved a fine passage from his work on Sacrifices which enables us to judge of him apart from the philosophic halo invented by Philostratus. The passage is too long to quote in full, but it may be abridged as follows:—

"That man, methinks, would show a just appreciation of the Divinity, and he, if any man, would experience the divine grace and benediction, who should make no visible sacrifice to the First God—the One—the Separated from all others, to whom all other gods are altogether secondary; nor should he light a fire, nor name Him by the name of sensible things, for He needs naught—nay, not even from the gods; but he should direct to Him his mental prayer, and through his noblest faculty, the reason, ask good things from Him who is super-excellent in wisdom."

Many streams of thought are blended here. The Jews of the Diaspora in the first century A.D. had carried the separation of the Creator from the creature to the uttermost, and the cult τοῦ Ὑψίστου, of the Most High, originating doubtless under Jewish influence, was spread through Asia Minor. In Apollonius' conception of the First God there is nothing singular. It is the note of asceticism which is novel in a Greek. As a Pythagorean Apollonius abstained from flesh; he drank water; he wore the linen garments of a priest. But he went much further. He abstained from marriage; and here he declares that the idea of Divinity is stained by human utterance. His attention is devoted not to theosophic speculation, but to divine symbolism and ascetic practices. In all this he was essentially Syrian. Syrian likewise in his worship of the sun, to which he daily addressed his prayers. He was devoted to the Babylonian science of astrology, and wrote a book upon it. As a Pythagorean, he believed in metempsychosis; whether he laid such stress on the immortality of the soul as Philostratus would have us think, is doubtful. The Oriental wisdom which Apollonius boasted of was probably the wisdom of the Magi, then numerous in Cappadocia. Had any of his books come down to us, it would doubtless have formed a valuable record of the religious thought of Syria in the first century A.D. But an original thinker Apollonius was not, although he was a striking figure. He cared nothing for speculations on the nature of gods or of men; he was a Pagan ritualist, intent on improving the modes of communication between the two, not without a hint that he belonged to both himself. We conceive of him as part charlatan and mountebank, part mystic and philosopher; meagre and ascetic, possessed of second sight and mesmeric powers, possessed also of some noble thoughts, one-quarter Greek and three-quarters Oriental, he is the first of Western fakirs. Shall we call him a vagrant Pythagorean or a wandering Indian gymnosophist? Neither in truth, but a curious amalgam of both. Such is our Apollonius—not Mr. Mead's. The portrait is less pleasing, but it is truer and more novel; it restores

Apollonius to his rightful place as the spiritual ancestor of Alexander of Abonoteichos, Peregrinus Proteus, and in a more remote degree of St. Simeon Stylites and the Syrian monks who, gazing on their navels, were illumined by the light that shone on Tabor—strange replicas of the Indian ascetic.

J. KENNEDY.

PROGRESSIVE EXERCISES IN THE CHINESE WRITTEN LANGUAGE. By T. L. BULLOCK. (London: Sampson Low, Marston, & Co., Limited, 1902.)

This well got up book by the Professor of Chinese in the University of Oxford is intended, as explained in the preface, to aid the beginner who wishes to go straight to the literary language of China, without devoting previous time and attention to the spoken tongue. The latter requires the presence of a native *hsien-shêng* to initiate the student into its many mysteries of pronunciation and tone; while even without such assistance, which is difficult to secure away from China, progress is possible in the former for the student who may wish to consult the older classical and historical books, or to translate documents in the business style used for all official writings at the present day.

After a short introductory chapter devoted to spelling and pronunciation, and a lucid account of the 'radicals,' we come to the progressive series of seventy-two exercises, each with its vocabulary, translation, and notes, forming the body of the work, which are followed by a full alphabetical index of 'characters.' The exercises have been carefully compiled from the native school primers, classics, and official documents, and they seem to be admirably adapted to equip the learner to proceed profitably to more advanced works, such as the *Documentary Course* of Sir Thomas Wade, which is specially recommended by Professor Bullock for the purpose.

Minute criticism is uncalled for here, but a word of commendation is due for the correct form and finish of the Chinese type, printed by E. J. Brill, of Leyden in Holland.

S. W. B.

DELHI: PAST AND PRESENT. By H. C. FANSHAWE, C.S.I. (John Murray, 1902.)

Assuming, as I think we ought, that Mr. Fanshawe's principal object was to produce a popular guidebook to Dihlī, we may say without hesitation that he has written a very good one; it is, indeed, as one reviewer was pleased to call it, a "glorified guide-book." My only doubt is whether it is not too good, and therefore too dear, for that purpose; and I enter a mild protest against the bad binding—my copy is already falling to pieces. The work is beautifully illustrated and well got up generally. Mr. Fanshawe, guided by his exceptional local knowledge, has selected an excellent and easily followed itinerary, while his flowing style and quick eye for architectural detail make the book most pleasant and instructive reading.

But writing in the pages of this Journal, any serious student of Indian history must feel compelled to express regret that, with so much in his favour, Mr. Fanshawe did not set himself the higher task of producing a thoroughly scientific and final work on the archæology and topography of Dihlī, with illustrative passages from the native chroniclers. As things stand, Sayyad Aḥmad Khān's *Aṣār-uṣ-ṣanādīd* (Dihlī, 1853) and the muddled English version of it by Carr Stephen, "Archæology and Monumental Remains of Delhi" (1876?), must still be used. In case Mr. Fanshawe ever returns to the subject, I call his attention to an excellent (Urdū) description of Dihlī among the manuscripts in the Society's collection. It is the second pamphlet (of 73 folios) in Persian MS. No. 351, and is described as "Account of the Inscriptions, etc., on the Masjids, Tombs, and Sacred Edifices of Shahjahānābād and its Environs," by Sangīn Beg, son of 'Alī Akbar Beg; it is dedicated to Charles Theophilus Metcalfe, and must have been compiled early in the nineteenth century. I believe that Sayyad Aḥmad Khān was very largely indebted to this predecessor's labours. There is also a very large map of Dihlī in the map-room at the India Office, which ought to interest

Mr. Fanshawe, if he does not already know of it. It possesses the merit of having been prepared before 1857, and therefore shows the streets near the palace and the palace itself as they were in the Moghul time, before the clearings inside the Fort, and between it and the Jāmi' Masjid, effected after the Mutiny.

An account of the siege of Dihlī during the Mutiny of 1857 occupies 141 out of a total of 329 pages, and is one of the best things in the book; though from my point of view I would wish it away, and the space thereby saved devoted to archæology pure and simple. Of all the branches of knowledge on which his book touches, it is perhaps in history that Mr. Fanshawe is least well equipped. Even a guidebook is not, I trust, any the worse for being as exact as it is possible to be in such matters; I therefore venture to enter in some detail into points of history, which will, I fear, seem to the author the very "mint, anise, and cumin" of criticism.

On p. 2 Mr. Fanshawe inadvertently repeats the old error, to kill which Major Raverty has laboured so hard, that the invaders of the twelfth century were Pathans. The Ghorīs themselves were Tājzīks, and their generals, either Turkī slaves or Khalj Turks. Among the other short-lived capitals (p. 3), was there not a Khiẓrābād, founded in 1418 by Sayyad Khiẓr Khān (Carr Stephen, p. 159)? As to the remark on the same page about the palaces of the nobles, there cannot be the least doubt of their existence, as the names of several were well known and are often mentioned. Is it quite correct to say (p. 4) that in 1761 Aḥmad Shāh, Abdālī, placed Shāh 'Ālam on the throne, that monarch having succeeded *de jure* in 1759, without appearing at Dihlī till 1771? The distich on the same page is, in its original form, of much older date, see Budāonī, i, 375, writing of the year 797 H. (1394), where it reads: *Ḥukm-i-khudāwand-i-'ālam az Dihlī ta Pālam*, or as quoted in Elliot, v, 74, n. 4, from the *Tārīkh-i-Dāūdī* (written between 1605 and 1627): *Pādshāhī Shāh 'Ālam Az Dihlī tā Pālam.* On p. 18, for 'Mardān 'Alī Khān' read ''Alī Mardān Khān,' the well-known Persian

who traitorously ceded Qandahār to Shāhjahān. As to the place (p. 28) where Jahāndār Shāh and Farrukhsīyar were confined and murdered, it is called in the histories the Tirpoliyah, or Triple Gate. I would suggest that it was a distinct building, and not part of the *naqqār-khānah*, or Band-room, probably one of the two gates to the right and left of the courtyard which lies between the Mīnā Bāzār and the Naqqār-khānah. I am inclined to think that the railings in the Audience Hall (p. 28) were called *Jālī* (literally, lattice-work); while the name *Gulāl-bār*, or Red Enclosure, was confined to the canvas and wood screen enclosing the emperor's tents when he was in the field; or to the temporary enclosure that anyone receiving an imperial rescript erected for the requisite ceremonial. In 1717 a *gulāl-bār* was erected by the governor and council of Calcutta at Hūglī, to which they repaired, in honour of Farrukhsīyar's *farmāns* granting them trade privileges. On p. 33, for 'Abode of Splendour,' from *jalwah*, I would suggest, as more justified by the usual spelling without the final *h*, that the word comes from *jilau*, a bridle, or in its secondary meaning, a led horse, hence, a retinue generally. Led horses and caparisoned elephants stood night and day in this courtyard. The space between the palace walls and the Jamnah (p. 33) is usually called the Retī, from *ret*, the Hindī for sand.

On p. 34 (note) the statement as to Shāhjahān's failure to appear at the balcony window in 1657 is ambiguous; it leads one to infer that this event is connected with Dihlī, while it actually occurred at Āgrah. The exact meaning of *Ghusal-khānah* (p. 38) is found in a passage in the *Maāṣir-ul-umarā*, ii, 442 (biography of Sa'dullah Khān, 'Allāmī, the wazīr): it was Akbar's name for the room in which he held secret councils; Shāhjahān disliked it and altered it into *Daulat-khānah-i-khāṣ*, but the old name stuck to it. At Dihlī it stood between the emperor's private apartments and the *dīwān-i-khāṣ-o-'ām*. On p. 43 the murder of the eunuch Jāwed Khān, Nawāb Bahādur, is made to happen along with the deposition and blinding of Aḥmad Shāh (1st June, 1754); it

really took place on the 6th September, 1752, in Ṣafdar Jang's house. In spite of his great position and influence at Court from 1720 to 1734, Roshan-ud-daulah was never more than third Bakhshī (p. 50); certainly he was never 'Bakhshī' in the sense of being first, or Mīr Bakhshī. As to the Qadam Sharīf, p. 63, I may as well mention the curious fact stated in the *Tārīkh-i-Aḥmad Shāhī*, fol. 18*b*, that until Aḥmad Shāh and his mother went there in state in 1751 or 1752, no ruler of Dihlī visited it, because the builder of the shrine had placed the stone bearing the imprint of the Blessed Footstep over his own grave, and they feared, I suppose, an accusation of worshipping a mere mortal. The derivation for Shālihmār (p. 60) from *shālā* (Sanskrit), 'abode,' and *mār* (Sanskrit), 'joy,' is most ingenious and may be correct; but one would like to know more about it, as it is not very obvious, more especially the second half of it. One would expect a Sanskrit compound word to observe the order 'joy-abode,' and not 'abode-joy.' The D'Eremaos mentioned on p. 62 are a branch of the Portuguese family called Val, Welho, or Velho, who long held command of the palace guard, and were connected with the Bibi Juliana about whom Mr. Beveridge lately read a paper. Is Mr. Fanshawe quite sure of the identity of the lady named Malikah Zamānī Begam (p. 63)? I have never seen Muḥammad Shāh's mother called anything but Nawāb Qudsiyah. Is not the lady meant the Malikah-i-zamānī, daughter of Farrukhsīyar, who was married to Muḥammad Shāh in 1133 H. (1720–1), and died in 1203 H. (1788–9)? I am confirmed in this identification by W. Francklin, "Shah Aulum," p. 208, who wrote so near the time. He states that this lady (Malikah-i-zamānī, wife of Muḥammad Shāh) was buried in the Tīs Hazārī Bāgh near the Kābul gate. The statement on p. 64, referring to the Ajmerī gate, requires reconsideration. The Ghāzī-ud-dīn Khān, Fīrūz Jang, from whose name it gets its designation, was the *father*, not the *son*, of Niẓām-ud-dīn, Āṣaf Jāh. He died on the 8th December, 1710, when governor of Aḥmadābād Gujarāt. His grandson, another Ghāzī-ud-dīn Khān, Fīrūz Jang, died

from poison at Aurangābād on the 17th October, 1752, and on the 10th January, 1753, his body was buried "in his grandfather's tomb" (British Museum, Oriental MS., No. 2,005, fol. 46*a*). The Zīnat-ul-masājid, built by the second daughter of Aurangzeb, bore the date of 1122 H. (1710) on the tomb, but the lady herself did not die till about 1720. It could hardly have been built in 1700, as the Begam was in the Dakhin in her father's camp until his death, and only returned to Dihlī in the second half of 1707. On the same page (68), surely the direction of Paṭparganj from Dihlī is wrongly given; should not 'south-*east*' be read for 'south-*west*'? Its official name as one of the great grain-marts was Ṣāḥibganj. Mr. Fanshawe is, of course, entirely justified (p. 68) in assigning Roshan-ud-daulah's mosque in the Faiz Bāzār to 1745, in accordance with Sayyad Aḥmad Khān's (pt. ii, p. 90) and Carr Stephen's statements (p. 273). But I have considerable doubt as to that date, that is, 1158 H.; first, because Roshan-ud-daulah died in 1148 H. (April, 1736); secondly, because the chronogram, as given in the *Aṣār-uṣ-ṣanādīd* (pt. iii, p. 45), yields, according to my reckoning, 1148 H. and not 1158 H. It reads: *Masjide chūn bait-i-aqasī muḥīṭ-i-nūrullah*, that is, (40 + 60 + 3 + 4 + 10) + (3 + 6 + 50) + (2 + 10 + 400) + (1 + 100 + 90 + 10) + (40 + 8 + 10 + 9) + (50 + 6 + 200) + (1 + 30 + 5) = 1148.

In the note to p. 69 and again on p. 308 are two statements open to question: one of them, the date, is very nearly, but not quite correct; the other, the place, is quite wrong. Sūraj Mal, Jāṭ, was killed, not in 1764, but on the 29th or 30th December, 1763, not at Shāhdarah outside Dihlī, but close to Ghāzī-ud-dīn-nagar, eighteen miles away. When naming the Nīlī Chhatrī close to the Fort (p. 69), it might be added that this was a favourite resort of Udham Bāe (otherwise Qudsiyah Begam), mother of Aḥmad Shāh, in 1748–1754. For 'Samsam-i-Daulah' (p. 69) read 'Samsam-ud-Daulah,' as in Thorn, p. 126.

Passing over pp. 80 to 221, devoted to an account of the Mutiny, we come on p. 226 to the statement that 'Ālamgīr II was murdered in 1761. The correct date is

the 28th November, 1759. There is a contemporary account of the crime in the British Museum, Oriental MS. No. 1,749, fol. 214*a*. One Ẓafarullah Khān, an underling in the employ of Ghāzī-ud-dīn Khān 'Imād-ul-mulk, the wazīr, was sent to report to the Emperor the arrival of a holy man from Lāhor, who had taken up his quarters at the Koṭilah of Fīrūz Shāh. At noon the Emperor reached the Koṭilah by way of the sands along the Jamnah; with him were Ẓafarullah Khān and a few palace eunuchs. As they came up they found some Moghul followers of Bālābāsh Khān, commandant of one of the Wazir's regiments, grouped at the gate of one bastion. They announced that the *darvesh* was in that room. On arrival at the doorway the Emperor descended from his chair of state and entered the room in the bastion, the Moghuls allowing no one else to pass inside except Muṣāḥib 'Alī Khān, a palace eunuch. Mirzā Bābā, the Emperor's nephew, was left outside; he and the rest of the men moved off in various directions and sat down. The prince took a rug from one of the retinue, and spreading it out on a masonry platform, began to recite the afternoon prayers. Bālābāsh Khān had meanwhile cut down and killed the Emperor with his poignard (*khanjar*), and coming to the prince said: "Get up and come with me." The prince replied: "Where am I to go?" The Khān answered: "To the Emperor." "What is there for me to do with the Emperor?" "You must return to the Fort." Saying this, he snatched the dagger out of the prince's waist-sash, laid hold of his arm, and they set out for the palace. The Moghuls seized the horses and arms of the eunuchs and other servants; while the Emperor's corpse was taken away and thrown on to the sands beneath the Koṭilah. A story was concocted that 'Ālamgīr's foot had slipped on the terre-plein (*faṣīl*), that he had fallen, and thus had given up the ghost. Mirzā Bābā was placed in the Asad Burj of the Fort with his brethren.

There is a question I should like to raise with regard to the spelling of Bārahpalah on p. 233. Does that truly represent the local pronunciation, or is it not rather

Bārahpulah? The English ear is usually deaf to the difference of sound between the inherent vowel *a* and the short *u*; there is thus risk of confusion, and one would like to be quite sure of the true sound of the word. *Palah* is not found in the dictionaries with the sense of 'an arch,' and *pulah* does not seem to be in them at all. I have always treated the word as Bārahpulah, the 'twelve-arched' [bridge], connecting it with *pol*, a gateway, and *pul*, a bridge.

Ṣafdar Jang (p. 246) died on the 4th October, 1754, and not in 1753. On p. 306, note (lines 20 and 21), read 'Sa'ādat Khān' for 'Saadat Alī Khan' (died 21st March, 1739). He was Nawāb (that is, nāẓim or governor) of Audh, but never either Nawāb Wazīr or prime minister (wazīr). 'Ālamgīr Aurangzeb (p. 303) was the third, but far from being the youngest son of Shāhjahān. 'Ālamgīr's eldest surviving son and successor, Shāh 'Ālam Bahādur Shāh, died in camp outside Lāhor, and not at Dihlī. Muḥammad Shāh (p. 303) was enthroned on the 28th September, 1719, but his reign was counted from the 20th February, 1719 N.S.; by both modes of reckoning 1718 is wrong.

The young princes mentioned in note 2 on p. 305 both died in 1719, not in 1717, Rafī'-ud-darajāt on the 11th June, 1719 N.S. (having been deposed seven days before), and Rafī'-ud-daulah on the 17th or 18th September, 1719. The date of Farrukhsīyar's *farmān* to the East India Company (same page) was not 1715, but the 30th December, 1716 O.S. As for the entry of Nādir Shāh and Muḥammad Shāh (p. 307, note), according to an eye-witness they did not enter together; Muḥammad Shāh preceded Nādir Shāh by one day, the latter spending the night at Shālihmār. Nādir Shāh's stay in Dihlī (p. 307, note) lasted from the 19th March, 1719, to the 25th May, 1719 N.S.

On p. 308, top line, the Ghāzī-ud-dīn Khān there referred to ('Imād-ul-mulk, born 1735) was the grandson, not the son, of Niẓām-ul-mulk, Āṣaf Jāh, a former wazīr. His father, Ghāzī-ud-dīn Khān, Fīrūz Jang (eldest son of Āṣaf Jāh), who died from poison in 1752 as already stated, was never

wazīr. Aḥmad Shāh, Abdālī, arrived at Dihlī, during his third expedition into India, on the 20th January, 1757; and on his fourth expedition he reached the Jamnah at Burārī-ghāṭ on the 8th January, 1760. It would thus be better to say (p. 308, line 12) 'three years later' instead of 'four.' If you reckon four years between the two visits it throws out one or other of the dates, from whichever of them you begin your calculation. And Ghāzī-ud-dīn Khān, 'Imād-ul-mulk's 'hiding,' was not very effective, seeing that he lived openly, first at Bhartpur and then at Farrukhābād, where he was up to 1771. It was in 1780 that Colonel Goddard came across him near Sūrat; he returned to India about 1788–9, and died within his *jāgīr* of Bāonī, near Kālpī, somewhere about the year 1800. The sentence at the bottom of p. 308 and the top of p. 309 seems to me to place the share of the Mahrattahs in the return of Shāh 'Ālam to Dihlī in a wrong light. The Mahrattahs returned to Upper India in 1770, and it was at their urgent request that Shāh 'Ālam left the protection of the English at Allahābād. A strong Mahrattah army came down the Dūābah as far as Farrukhābād, to meet the Emperor and escort him to the capital.

Throughout the decline of the monarchy, from the year 1712 to the end in 1803, there was always some sort of Moghul court at Dihlī; and during those ninety-one years of most inglorious strife, there were scores of events which could be connected with some one or other of the places named in Mr. Fanshawe's book. Take for one instance the sudden swoop of Bājī Rāo on the people at the Chait fair of Kālkā Bhawānī in 1737 (7th April). The Emperor had just received a vainglorious dispatch from Sa'ādat Khān, Burhān-ul-mulk, reporting the total defeat of the Mahrattah Peshwah near Shukohābād (23rd March). The report of Bājī Rāo's raid on the fair was received at first with incredulity, and Muḥammad Shāh said it must be some petty band of thieves; after all, it was people's own fault for going out so far into the jungle and stopping there all night. However, a spy disguised as a faqir was sent out. In the evening he returned and threw down the piece of hard coarse

rye bread that Bājī Rāo had given him as an alms. He had seen Bājī Rāo and his Mahomedan concubine, Mastānī, seated on the same saddle-cover, eating their dry bread and chillies. At once there was confusion and uproar. Boats were gathered below the palace ready for flight, while some of the young bloods about the Court organized a force to resist in the field. The ensuing battle to the south of the city ended in an ignominious *sauve qui peut*; and had not the Wazīr by the greatest exertions hurried back from Āgrah, it is possible that Dihlī would have fallen into the hands of Bājī Rāo. Connected with the same occasion is Bājī Rāo's clandestine visit at night to the Nigambodh ghāt for a bathe at the holy place. Then there is the fighting, in March to August, 1753, all round Dihlī from Wazīrābād in the north to Koṭilah Fīrūz Shāh in the south, during which place after place comes into prominence as the scene of operations shifts.

Although these notes have inevitably assumed the form of adverse comment on and dissent from many of Mr. Fanshawe's statements; this does not preclude me from agreeing entirely with a very much larger number of passages, which I have necessarily passed over in silence.

WM. IRVINE.

(1) LA RELIGION DU VEDA, par H. OLDENBERG, traduit de l'allemand par VICTOR HENRY.—(2) LE BOUDDHA, par H. OLDENBERG, traduit par A. FOUCHER. 8vo; pp. 520 and 401. (Paris: Alcan, 1903.)

We are very glad to call attention to the appearance of these two standard works in French. English students who do not read German should take notice of this, as the "Religion des Veda" has not yet been translated into English; and the excellent translation of the "Buddha" which we owe to Dr. Hoey was necessarily based on the first edition. The third edition, represented in the present French translation, contains a number of corrections and additions which have considerably enhanced the value of the work. It would be unnecessary to repeat here what has

been said in our former pages on the importance of these two studies, the reputation of which is now well established. It is only necessary to point out that the names of the two gentlemen who are respectively responsible for the translations are ample guarantee of the sound scholarship and accurate intelligence of the versions that now lie before us.

INVENTAIRE DESCRIPTIF DES MONUMENTS DU CAMBODGE. Par E. LUNET DE LAJONQUIÈRE, Chef de bataillon d'Infanterie coloniale. (Paris: E. Leroux, 1902.)

The French school of the Extreme East, under the able direction of M. Finot, has, by its publications, been doing much and most valuable work for the elucidation of the early history of the eastern portion of the Further Indian peninsula. Among these, this fourth volume of the series—an inventory or descriptive list of the ancient monuments in Camboja—calls for attention, on account of its plan as well as its execution.

Its origin is thus stated by the author:—"Au mois de juillet, 1900, nous fûmes chargé par le directeur de l'École française d'Extrême Orient d'une mission au Cambodge. Il s'agissait de rechercher les monuments archéologiques et les inscriptions répartis sur le territoire du Cambodge actuel, d'estamper celles-ci, de préciser la situation géographique de ces monuments et de ces inscriptions, d'indiquer leur état de conservation et de désigner les pièces de sculpture qui devraient être transférées au musée organisé par l'École. Comme suite à ces recherches, nous devions établir un Inventaire descriptif, compléter l'atlas archéologique de l'Indo-Chine dont nous avons recueilli les premiers matériaux en Anam, et préparer un arrêté classant comme 'monuments historiques' les monuments inventoriés."

The *Atlas archéologique* was published in November, 1901, containing four large sectional maps in beautiful cartography—each measuring 25 by 18 inches, to a scale of 1/500,000 or 8·7 inches to a degree of latitude—and a general map of

Indo-China to a fifth of that scale, together with lists of all the monuments arranged both by districts and alphabetically.

The present volume completes the work of this commission, to which the *Atlas* is an important adjunct. It consists of two parts: (1) an introduction of 105 pages, dealing with the geographical situation and chronology of the monuments, their classification, construction, materials, ornamentation, inscriptions, etc.; (2) the description of the monuments—290 in number—extending to about 400 pages, followed by an index, list of 196 illustrations, and detailed table of contents. The whole plan of the work has been thought out with skill, and is admirably executed.

For fully forty years past the French Government has been sending out expeditions to explore the valleys of the Mekong and Menam rivers, and most of them—beginning with that under M. Henri Mouhot (1858–1861)—have devoted considerable attention to the remarkable antiquarian remains of the region. Thus, in the published reports of the explorations of Captain Doudart de Lagrée (1866), MM. Francis Garnier, Delaporte (1873), S. Moura, Dr. I. Harmand, M. Tissandier, and, lastly, of M. E. Aymonier, is contained a great amount of valuable information respecting these antiquities. The work of the last is specially devoted to epigraphy, with which it combines important descriptions of the old temples where the inscriptions are found, and it is richly illustrated. The aim of the present volume is to verify, correct, and complete the descriptions already published, which are occasionally defective or inaccurate in such details as orientation, etc., and to include all known monuments hitherto undescribed, reducing the descriptions to a fixed and systematic general form. By always beginning the accounts of the temples from the shrines and advancing outwards, and by using terms of relative position everywhere in the same way, a method is followed that tends to secure order, completeness, and precision.

The introduction is an important feature of the volume, and will repay careful study, supplying much information as to the structure and arrangement of the Cambojan temples and

their adjuncts. Among the latter, the small rooms or cells that often stand in the front of the courts of larger temples facing the main shrine are designated by the author as treasuries and libraries. These terms are ostensibly only conjectural; and, as the temples are really copies built after Hindu models of early date, the original purpose of such cells must be sought for in India. Structures occupying similar positions are not unusual in South Indian temples, but there they are not now, at least, used for the storage of valuables.

The structural methods employed in the erection of these temples and the arrangements of the buildings are here explained with an accuracy and careful detail that overlooks nothing of importance. And the illustrations are numerous and instructive, making the book a model one.

The numerous inscriptions in Sanskrit and in Khmer are mentioned in connection with the places where they have been discovered, with constant reference to Aymonier's *Cambodge* and to the translations of those in Sanskrit prepared by MM. Barth and Abel Bergaigne, and published with photographic facsimiles in 1885 and 1893. A number of new inscriptions have been discovered and are here described; but others had disappeared since M. Aymonier had noticed them, and could not be found by Capt. Lunet de Lajonquière (pp. 58, 65, 137, 187, etc.)—one "ayant été brisée par un bonze fou" (p. 3)—and others the villagers and priests would not say what had become of them (p. 261). This is just what occurs in India: a stone is wanted, and if an inscribed one is at hand it is seized; but if ever it is traced it is by accident rather than from enquiry.

The French school of the Far East has made a most valuable contribution to Oriental archæology in this comprehensive work.

J. B.

Cāndra-vyākaraṇa. Die Grammatik des Candragomin. Sūtra, Uṇādi, Dhātupāṭha. Herausgegeben von Bruno Liebich, Dr. Phil. Abhandlungen für die Kunde des Morgenlandes, xi, 4. (Leipzig: Brockhaus, 1902.)

This, the first part of Dr. Liebich's long promised work on the Grammar of Candragomin, was presented to the Hamburg Orientalist Congress in September last. It includes the text of the Sūtra, Uṇādi, and Dhātupāṭha, with full indices, and in the case of the Uṇādi paraphrases from the commentary. The Sūtras and the Dhātupāṭha are accompanied by references to the corresponding parts of the Pāṇinean system.

For the purpose of mere reference, therefore, the work is complete, and we may congratulate Dr. Liebich on the accomplishment in a very convenient form of this part of his difficult and laborious undertaking. But by far the most interesting part of the work is still to come, in the shape of an edition in full of the commentary, which is now ascertained to be, as Professor Eggeling first conjectured, by Candragomin himself. Based upon a fine MS., the property of the Nepal Durbar, which Dr. Liebich exhibited at Hamburg, and the exact Tibetan rendering in the Tanjur, it will present a quite reliable text, and must contain much that is of importance for the history of Sanskrit Grammar. The authors of the Kāśikā made use, as Professor Kielhorn pointed out (*Indian Antiquary*, xv, pp. 183–5), of the Cāndra sūtras, and therefore probably also of the commentary.

For a general discussion of Candragomin's work Dr. Liebich refers to his article in the *Nachrichten der Göttingische Gesellschaft der Wissenschaften* for 1895, where he has discussed all the works connected with Candragomin's system which are found in the Tanjur (*Mdo* cxvi and cxxxii). He now gives some further information regarding new manuscript material from Nepal. The total result is that, with the exception of a very small gap, the whole of the Sanskrit original is now recovered. The immense help which the existence of Tibetan versions of mūla and

commentary lends towards the establishment of a critical text is now sufficiently known; even in case we should not be able to fix the limits of date for these renderings within so narrow a period as "700 to 900 A.D."

I do not propose to discuss the text which Professor Liebich has elicited from these sources. On p. 27, n. 6, we find the interesting fact elicited that when issuing the sūtras with the Commentary Candragomin made certain small corrections in style and orthography. The reader will observe that most of the sūtras are derived from Pāṇini and the Mahābhāṣya. Generally the effort after brevity has led to a curtailment, quite in conformity with the statement of Tāranātha (trans., p. 152) that this was a principle of Candragomin's work. Professor Liebich's excellent critical notes call attention to the passages where there exists any cause for hesitation.[1]

It is curious that neither Candragomin nor his predecessor and antagonist Candrakīrti is known to us from Chinese sources, and we are consequently without an important aid in fixing their dates. Professor Liebich would regard Candragomin as contemporary with the Hūṇa invasions between 465 and 544 A.D. When fuller reports of the Congress at Hanoi reach us we shall be made acquainted with the view of M. Sylvain Lévi, a paper by whom on this subject was there read. The Lokānanda-Nāṭaka, when it is read by some scholar, may throw light on the question. At present we can only say that Candrakīrti and Āryadeva, who refer to each other, must be contemporaries.

The Cāndra grammar being now restored to the world, it is perhaps time to inquire what can be done towards the investigation of the Sārasvata school. Presumably the published text of this grammar represents a late recension. But among the grammatical works in the Tanjur there are several of this school, and perhaps something may be attained by these means. It would be worth while if, as we appear

[1] On p. 61, n. 2, should we not read (for *bdun . du = prāk*) *mdun . du*? The doubtful word *śvaḍala*, given p. 168 as the rendering of *harit*, would probably be for *śādvala*, adj. = 'green.'

to be informed by Mallinātha *ad* Meghadūta, v. 14, Kālidāsa belonged to this school.

I may here add the name of a grammatical work in the Tanjur which does not appear either in Schiefner's list or in any other enumeration known to me, viz. :—

Mañjuśrīśabdalakṣaṇa, Tanjur *Mdo* cxxxiv, 1–44, by Legs . par . grags (Sukīrti ?).

F. W. Thomas.

Pali und Sanskrit, von Dr. R. Otto Franke, Professor of Sanskrit at Königsberg. 8vo ; pp. vi and 176. (Strassburg : Trübner. Price 6*s*.)

This volume is a preparatory study for the author's Pali Grammar, which is to appear shortly in the *Grundriss* series founded by Professor Bühler and now edited by Professor Kielhorn. As is well known, all the early inscriptions and coin-legends are not written in Sanskrit, but in a dialect or dialects for which there is at present no generally accepted name. It is inaccurate to call it Prakrit, a word which has a clearly defined meaning in Indian usage, meaning exclusively the dialects considered in Professor Pischel's "Grammatik der Prakrit-sprachen." It is a very useful, indeed necessary, word in that sense ; and it is a distinct loss to use it as the designation for a very different set of philological phenomena.

The author calls this language of the early inscriptions and coins Pali, using the term 'literary Pali' for the Pali as it appears in the canonical books of the Buddhists and in the later literature based upon them. This also seems to me to be matter for regret. As now generally used and understood, the word Pali has a clear and distinct connotation, and to substitute for it the clumsy and long expression 'literary Pali' is a loss. It would have been far better to have retained the word Pali (which, after all, means a line, or rule, or canon) in the old sense of the language of the canonical books. It is true that, if this be done, then another name must be found for the language

of the inscriptions and coins; and any new name is under a disadvantage. I have suggested elsewhere that the word 'Kosalī' might be used, as the word 'Māgadhī,' in some respects more suitable, involves the same sort of confusion and ambiguity as 'Prakrit' or 'Pali.'

This objection to the name of the language referred to as Pali is, however, a minor matter. The main point is whether the facts collected are accurate, and the arguments based upon them are sound. It will be well, therefore, to state at once what these are.

We have in Chapter i a list of the inscriptions, and of the coins, that can be dated within a period extending from the third century B.C. to the second century A.D. This is a very careful and elaborate list, and will be found most useful. It suffers from one objection. The author does not pretend to be either a numismatist or an epigraphist. He gives the dates as stated by the best authorities, though he points out cases where their conclusions seem doubtful. Future investigation may show—specialists could, no doubt, even now, in some cases, point out — that some particular date or some particular reading is wrong. But we have not elsewhere any such list as is here provided for us; and it shows, with great clearness, the range of material on which the thesis is based. This list of many hundred inscriptions and coins occupies fifty pages, and the first two chapters.

In Chapter iii the author points out the main conclusion which is forced upon us, at first sight, by these materials. The language of India during the period in question was not Sanskrit. Sanskritisms are found imbedded in the dialect used. These are at first very rare, then they gradually increase, until, at the end of the period, the inscriptions, with certain exceptions, have become Sanskrit with Palisms (as the author calls them; I should prefer Kosalisms) still surviving in them. The main fact is already generally acknowledged. But the author states it with much greater fulness and detail than has yet been done. He shows what the Sanskritisms are, and distinguishes

between the results apparent at different epochs and in different districts of India.

Chapter iv discusses, and again with full details, and with the necessary distinctions of time and place, the reverse set of facts—the kind of Palisms (or Kosalisms) that survived especially from the third century A.D. onwards, and when and where they survived.

In Chapters v and vi we have the author's conclusions from the data set out above as to the date and locality of the gradual rise in the use of classical Sanskrit. One of these is that Sanskrit proper (as distinguished from Vedic) was mostly cultivated in one distinct part of India, the country from the Doab to the mountains, and that its home was probably originally in Kashmīr.

In the following chapters we have the author's conclusions from the language of the inscriptions and the coins as to Pali (that is, Kosalī). The first of these is that the dialect, whatever it be called, then used throughout India was, in fact, one dialect; and he gives, in support of this conclusion, a detailed sketch of what were the peculiarities of this dialect, the Hindustani of the centuries before Christ.

The second is that, besides and notwithstanding the essential unity of this dialect, there is evidence of local peculiarities, amounting to local dialectic differences. These he gives in detail, again distinguishing the facts he quotes both according to place and according to time.

The third is that the literary Pali used in the canonical books is nearest to the particular local variety of the popular tongue that was current in or near Avanti. One by one the author goes through other local varieties, used in the north-east, the north-west, in or near Mathurā, in the Dekkan, and in the Kathiawad, and shows in detail how these varieties differs from the literary Pali.

Finally, the author gives a list of those peculiarities of the Vedic language which distinguish it from classical Sanskrit and are found also in Pali — a list much longer and fuller than the only one we have so far had, that is to say, the list in the preface to Childers's Dictionary.

Now, quite apart from the validity of the author's conclusions, quite apart even from the accuracy of the readings the author takes over from the numismatists and epigraphists, it is a most excellent and useful piece of work that is here accomplished. To have classified and arranged according to time and place, and according to the moot questions they elucidate in the history of language, an immense number of linguistic forms hitherto, for the most part, and precisely for want of such a guide, necessarily jumbled together and confused, is a signal service to have rendered to the history of speech in India. So much will be readily admitted. But it would be probably safe to go further. The author raises the right sort of questions, and deals with them by the right sort of method. His conclusions are eminently sound and reasonable. Supposing that in a dozen cases the readings adopted by the author, or by the epigraphists or numismatists, or the dates they assign to the inscriptions or the coins, should turn out to be wrong, that would still leave ninety-eight out of each hundred details unaffected — in other words two per cent. of the evidence would have to be struck out. And the author has been careful so to state his conclusions that they would not require, in such a case, much modification. He has placed the whole question on a new footing, and his work will be quite indispensable to any future worker in the same field. The last word, as a matter of course, has not been said. Some of the details quoted will have to be modified; details not here quoted will be added. The conclusions as eventually accepted will not be quite the same; but they will be influenced to a very large extent by this important monograph, which is a real addition to our knowledge, and worthy of that excellent German training in sound methods to which we Indianists already owe so much.

T. W. Rhys Davids.

DIE SAGENSTOFFE DES ṚGVEDA UND DIE INDISCHE ITIHÂSA-TRADITION, von EMIL SIEG. I. pp. vi, 150 + [1]. (Stuttgart: Kohlhammer, 1902.)

The work of which Dr. Sieg of Berlin submits a specimen in this fasciculus constitutes a bold attempt to deal with one of the most important problems of Indian literary history. The hymns of the Ṛgveda have in a large number of cases an obvious ritual application which reveals at the same time the object for which they were composed. But many of them are denied any such application even by the native critics, and European scholars will consider the devices by which others have been adapted to purposes of ritual as artificial interpretations. With regard to such hymns a question arises as to the circumstances of their composition. Are they purely independent utterances or were they intended to be communicated in some context? In the latter case, is the context easily inferrible from the hymns themselves or have we any external aids for ascertaining it?

The answer to a part of these questions may be taken as a matter of common acceptance. There *are* hymns in the Ṛgveda which imply a context, and of these some at any rate demand for their explanation the help of other literary material. Dr. Sieg points out that this truth, first brought to light by Professor Windisch, who recognized the hymn of Purūravas and Urvaśī (R.V., x, 95) as a dialogue without context, has been clearly expounded by Professor Oldenberg,[1] and all scholars familiar with Pischel and Geldner's *Vedische Studien* are aware what use these authors make of the same conception. Professor Oldenberg well compares the relation between the verse and prose of the Pali Jātaka, and finds in this system of text and sermon the prevailing literary type of pre-Buddhist times. We may add of post-Buddhist times also; for the conjunction of a text in itself brief and obscure with an indispensable commentary is, one might say, the prevailing one in all periods of Indian literature down to

[1] Z.D.M.G., 1883, pp. 54–86; 1885, pp. 52–90.

the present, and we need have no *a priori* scruples in recognizing the same deeply rooted intellectual habit in the Ṛgveda itself. The figure of the poet who recites his verse in the middle of a prose narrative is still familiar in all parts of India, and may have been familiar in the earliest age.

But if there are many hymns in the Veda which imply a story, it is an inference of mathematical certainty that not all these stories have been lost. There may have been much change and transformation, which is indeed the fate of all Indian writings, affecting not only epics but also highly finished compositions such as the Śākuntala. But it would be a miracle if nothing were left in the later literature capable of explaining the earlier.

This thought is developed and pointed in the introductory part of Dr. Sieg's work. He shows that the critical principle in question was familiar to the Indian commentators and precisely expounded by them. The most general term for the application of a hymn was *viniyoga*, and they distinguished between the expressed and implied *viniyoga* of hymns and parts of hymns. Their discussions proceeded predominantly from four points of view, and they were classed as *yājñikāḥ*, *ātmavidaḥ*, *nairuktāḥ*, or *aitihāsikāḥ*, according as they treated the hymns from ceremonial, philosophical, grammatical, or mythological-historical standpoints. In the Brāhmaṇas, and in general commentaries such as that of Sāyaṇa, there is a commingling of all three methods of interpretation. But we have an example of all the mainly etymological treatment in Yāska's *Nirukta*, while the philosophical criticism gave rise to the transcendental or *Adhyātma* explanations.

Dr. Sieg maintains that the existence of the forms *aitihāsika* and *paurāṇika* in their context in the Mahābhāṣya (iv, 2. 60) proves the existence of a particular work entitled *Itihāsa* or *Purāṇa*, as a textbook or collection of mythological lore. But we cannot admit the force of this argument. Patañjali makes no mention of the formation *ākhyānika* in the sense of 'a student of *ākhyāna* or romance,' recording special names as *vāsavadattika*, etc., for 'a student of the *Vāsavadattā*

story,' etc. But this may be due to the fact that the *purāṇa* or *itihāsa* is from the nature of the case a single body of legend, while romance is capable of indefinite extension. We, too, have 'historians' and 'mythologists,' but no 'novelist' in the same sense. Whether the remainder of Dr. Sieg's argumentation on this head is conclusive cannot be answered without a longer inquiry. But even if the Indian commentators employ the words *itihāsa* and *purāṇa* of definite literary types of works (as Dr. Sieg urges, pp. 27 sqq., 33), this is not the same as referring to one single work. The terms *aitihāsika* and *paurāṇika* seem of precisely the same nature as *vaiyākaraṇika*, *chāndasika*, and *naiyāyika*. Why, indeed, should we not be content to understand by the word *purāṇa* a class of writings from which sprang the *purāṇa* par excellence, the Mahābhārata, which, as Dr. Sieg mentions, the Indian commentators understood by the name? This, however, is very far from a systematic treatment of mythology.

The main body of Dr. Sieg's work, pp. 44–142, deals with individual hymns and legends, and constitutes the practical application of his theory. The case is emphatically one for the maxim *solvitur ambulando*, and if in a number of cases it is possible by the employment of later legends to contribute towards the elucidation of the hymns, the value of this method stands beyond dispute. I do not propose (nor do I claim any special competence) to examine in detail this part of the book. In the case of many of the legends Dr. Sieg seems to me to come materially nearer to the right interpretation and even to attain to a definite solution. One of the best examples is the legend of Śyāvāśva as compared with R.V. v, 61. The relation between the two seems to be established, but there nevertheless remains an obscurity in the story as concerns the part played by Taranta, Purumīḷha, and Śaśīyasī. If from some other source Dr. Sieg should be able to throw light on this part of the legend and at the same time elucidate the relations between Śyāvāśva and the Aśvins (Śyāva, see Macdonell, "Vedic Mythology," p. 52), the whole hymn will be fully explained.

Dr. Sieg is fully capable of dealing with his material, and

it would be impossible to gainsay the learning and skill with which he handles it. We regret only that he has several times (e.g., p. 126, p. 137, n. 4) treated the Bṛhaddevatā as posterior in date to the Mahābhārata, whereas Professor Macdonell has pointed out to me that the reverse is the case. If I may call attention to two details with which I should previsionally disagree, on p. 84 we find the word *mámat* of R.V. iv, 18. 8–9, explained (with Grassmann) as augmentless imperfect of *mad mamátti*, while on p. 97 Dr. Sieg proposes to emend a note of Harisvāmin,

daurgrahā nāma daurgahenāśvena saṃhatena kratunā ījẹ,

by reading *sa ha tena* for *saṃhatena*. I cannot resist the conclusion that Ludwig is here right in taking *mámat* as a *pronoun*, referring back to the *mama* of v, 7. In that case we must regard it as an ablative = Prakrit *mamatto*. In the second passage, I should prefer to read *daurgaheṇāśvena saṃhatena* with the text, and interpret it to mean with a *daurgaha*, i.e. an *āśva saṃhata*, 'a body of horse,' so that *daurgaha* bears the same relation to *durgaha* as *auṣṭra*, 'body of camels,' etc., to *uṣṭra*, etc. Perhaps the original reading was *daurgahenāśvena áśvasamūhena kratunā*. The simplex *durgaha*, 'horse,' is no doubt a compound of *dur* = *dhur* with *gāh*, and analogous to ζύγια, *jumenta*, *dhaureya*. With the *tmanā* = *svayam*, noted p. 49, n. 5, we may compare the classical *ātmanā*, which bears the same sense.

What we have said will be sufficient to show to the reader that Dr. Sieg has in this work made a valuable contribution to the solution of a problem which, if it is ever to be solved, must be solved on the lines which he here lays down. Inasmuch as his familiarity with the subject and the essential aids to its investigation, and further his skill and scholarly method in dealing with these, are fully on a level with the high demands of modern research, we hope that he may find the necessary support for continuing the publication of the large mass of material which he has prepared.

F. W. Thomas.

HORÆ SEMITICÆ, I, II. THE DIDASCALIA APOSTOLORUM: I. Syriac Text; II. English Translation. By MARGARET DUNLOP GIBSON, M.R.A.S., LL.D. (London: C. J. Clay and Sons, 1903.)

The *Didascalia* consists of a series of rules and exhortations regulating the conduct of the clergy and congregation of the early Christian Church. It was originally written in Greek, but has survived only in more or less incomplete versions, of which the Syriac is the most valuable. The Syriac text was edited some fifty years ago anonymously (by the great Lagarde) from a Paris MS., which was then unique. Lagarde's book—only 100 copies were issued—has long been out of print, and other MSS. have since come to light, among them a copy of an ancient MS. which was acquired a few years ago by Professor Rendel Harris in Mesopotamia. There was, therefore, room for a new edition of the text, and Mrs. Gibson is to be congratulated on her performance of a piece of work which places all students of early Christianity under an obligation. The *Didascalia* has been held to date from the third century; it throws a welcome light upon the practices of the early Christians, and exercised great influence upon the structure and ecclesiastical government of the Church. It appears now for the first time with an English translation, and it is not too much to hope that this may lead to a closer investigation of the critical questions with which the book is bound up.

That the *Didascalia* should have had ascribed to it the authority of the Apostles is not an unknown practice in the East, where greater influence and attention was procured for a writing by deliberately issuing it under the name and authority of famous personages. Mrs. Gibson's remarks may be quoted here:—

"When we have got over our initial amazement that any body of ecclesiastical rulers should attempt to use the names of their predecessors instead of their own, we must acknowledge that most of the precepts and practices inculcated are excellent, and well

worthy of our own consideration. . . . . To some minds, no doubt, this document, from its early date, will appeal with greater force than to others; and to these I would respectfully suggest that if they consider it to be really of Apostolic authority, they ought to adopt its rules in their entirety; but that it is not legitimate to accept one and reject another, unless that other be proved to be a later interpolation."

Mrs. Gibson has edited the Syriac from the copy referred to above, and has collated it not only with Lagarde's text, but also with fragments preserved at the British Museum, at Cambridge, and at Rome. Her translation is conscientious and painstaking, and her introductions to the volumes are useful, though all too brief. It is interesting to find that among the multitude of Scriptural quotations in the text there are some (from the Gospels) which seem to be derived, not from the Peshitta, but from the old Syriac version which it superseded. Many of them, also, agree with neither, and it has been conjectured that these owe their origin to a Gospel harmony.

In conclusion, as an illustration of the style and contents of the *Didascalia*, we append an extract from Chapter xii, dealing with the positions to be occupied by the congregation at Divine Service:—

"For as we see the irrational beasts, we mean oxen, sheep, and goats, lying down in herds, rising and feeding and mating, and none of them is separate from its race; and also the beasts of the deserts go in the mountains along with those who are like them. Thus, therefore, it ought to be also in the Church, that those who are children should sit by themselves, if there be room; if not, let them stand upon their feet. And let those who are advanced in years sit by themselves. . . . Again, also let those who are girls sit apart. . . . Let those who are married and young and have children stay by themselves, but the old women and widows sit by themselves, the Deacon seeing as every one enters that he goes to his place, lest any one sit in a place that is not his. Let the Deacon also notice lest any one whisper, or sleep, or laugh, or make signs; for thus it is required that [people] be attentive in the Church, with watchfulness and good manners, and with their ears open to the word of the Lord."

S. A. C.

THE TRAVELS OF PEDRO TEIXEIRA, translated and annotated by WILLIAM F. SINCLAIR and DONALD FERGUSON. (Hakluyt Society, 1902.)

The appearance of a work bearing the late Mr. Sinclair's name on its title-page, renews our regret at his early death, before he had time, after his release from official cares, to give to the world the result of his exceptional experience of things Indian. No one who saw his vigorous frame or listened to his vivacious talk, could have anticipated for him anything but long years of life and labour.

The book consists chiefly of a translation from the Portuguese of that portion of "Relaciones de Pedro Teixeira . . . ," published at Antwerp in 1610, which contains the account of his journey from India to Italy in the year 1604 (pp. 1–152). This translation and most of the notes to it are by Mr. Sinclair. Prefixed to it are an account of the author (i–xxiv); an essay on the First Coming of the English and Dutch to the East (xxv–lxxxix); and the bibliography of Teixeira's book. All these are by Mr. Donald Ferguson, who has added (pp. 153–267) a translation of Teixeira's history of Harmuz (Ormuz), extracts from his "Kings of Persia" and "Most notable Provinces of Persia," concluding with an earlier Chronicle of Harmuz by a Dominican friar.

So far as I have any means of testing it, all of Mr. Sinclair's and Mr. Ferguson's work seems excellently well done. Mr. Ferguson, in particular, displays very wide acquaintance with the literature of the subject, above all with the Portuguese branch of it. Perhaps, if one wanted to be very critical, it might be objected that Mr. Ferguson's long excursus (of 65 pages) on the English and Dutch voyages, excellent as it is in itself, rather overweights the rest of the book, and stands a little outside its subject. As for Teixeira, I should not place him very high myself in the list of early writers of travels. He has little of the *naiveté* which is their chief charm; and his contributions to solid knowledge would not be much missed. The route had been

travelled before, and was travelled several times afterwards. No doubt, he is useful in continuing the chain of knowledge between his predecessors and his successors. In his history of Ormuz, however, he becomes a first-hand, if not a unique, authority (Appendix A).

For my own part, I find the extracts from his delightfully digressive "Kings of Persia" (Appendix B) much more entertaining reading than the Travels. For instance, there is the traveller's tale, on p. 223, about the fish and the cats at Maskat. "A hungry cat will come down to the beach and lay her tail in the water, to which the little fishes come and take hold of it. When she feels them fast, with a whisk of her tail she lays them high and dry, and satisfies her appetite." Mr. Sinclair's comment is also good: "I know that fish are sometimes foolish enough for this story to be true, but I doubt the cat's being clever enough." Or take again, on p. 232, the account of the weed which grew in the streets on the Coromandel coast, and if chewed so that the teeth retained the juice, any stone, however hard, could be reduced to dust without hurting the teeth; "as proved many times in my own person, and by means of others; which surely should make us all praise the Creator, who has granted such power to a weed." Mr. Ferguson says he cannot identify this marvellous 'weed'; I wonder whether anyone else can?

On one occasion only have I found Mr. Ferguson tripping. Teixeira (p. 200) says "the husks [of the poppy] are called *pust*, those who do so [i.e. use the husks] go by the name of *pustys*"; to which Mr. Ferguson appends the note: "Persian *past* = low, mean, vile, etc. This can hardly be the origin of the term *pusties*. . . . ." Here he diverges into a discussion of the origin of the class of people so called by the Dutch in the East. There is, of course, a Persian word *past*, of which the meaning is correctly given by Mr. Ferguson. But it must be obvious to anyone familiar with Persian or Urdū that Teixeira's *pust* can be nothing but the word *post*, literally 'skin, hide,' which is the ordinary name for the poppy-head or capsule, just as *afīm* is for the juice.

WILLIAM IRVINE.

THE CREATION-STORY OF GENESIS I: a Sumerian Theogony and Cosmogony. By Dr. HUGO RADAU. pp. xv and 70. (Chicago, Open Court Publishing Co.; London, Kegan Paul, Trench, Trübner, & Co., 1892.)

In this little book the author, who is in the forefront of rising Assyriologists, brings many arguments to show that the Creation-story in Genesis is of Sumero-Akkadian (i.e. non-Semitic Babylonian) origin. That this is to a great extent true there can be but little doubt, as incontrovertible historical facts abundantly indicate (e.g., the statement in Genesis that the early migrants found a plain in the land of Shinar, where they settled, and built the tower of Babel; and the record that Abraham, the ancestor of the Jewish race, was born in Ur of the Chaldees).

Just how much of the story or stories of the Creation in Genesis, however, is Sumero-Akkadian is not by any means clear, for the compiler of the sacred narrative would seem to have taken simply as much as suited his purpose, filling in the rest either from other sources or from his own inward convictions. Thus, in the first chapter of Genesis, though water is the first existing thing, and the earliest abode of life, there is no indication that the author of the narrative conceived it as a living being in the form of a dragon, as is stated in the Babylonian story of the Creation, notwithstanding that the Dragon-myth, where the Tauthé (Tiawatu, 'the Ocean') of the Babylonian story appears variously as Rahab, Leviathan, and 'the serpent,' was certainly well known to the ancient Hebrews. The enormous differences which exist between the Biblical and the Babylonian narratives would seem to point rather to a common origin for the two, than the borrowing of the former from the latter, either wholly or in part.

The author makes the Babylonian primæval ocean to be "a monster of double sex: a masculine and a feminine in one person, a kind of androgyn," and by the "joining of their waters in one" the gods were created. It is doubtful,

however, whether the suggestion that הארץ in verse 2 should be translated "the chaotic mass (or primæval waters, ocean)" will meet with acceptance. Dr. Radau further goes on to say—

"If the Hebrew Tehom is equal to the Babylonian Tiâmat, then 'the waters' must be the (Babylonian) 'apsû.' But if 'the waters' are the 'apsû,' then 'the spirit of God' must be it too! This follows from the parallelism (of the two accounts)."

But the writer of Genesis i, on the other hand, apparently did not believe in an androgynous monster, and whilst retaining the Tiâmat or Tehom, substituted for the apsû 'the spirit of Elohim' as the life-giving power of everything; and if Tehom be equivalent to Tiâmat, then חשך, 'the darkness,' must be Tiâmat too. It was, therefore, rightly said that the fight of *Merodach* with *Tiâmat* was nothing more nor less than a conflict between *light* and *darkness* (pp. 8–9).

The greater part of the book is occupied with a rather argumentative, but suggestive and interesting, discourse concerning the Babylonian pantheon, with special reference to the cosmology. Unfortunately, this part is rather special, and even the device of humorously attaching the titles 'Mr.' and 'Mrs.' to the names of deities in some cases does not relieve it from this disadvantage—a rather serious one in a book not read exclusively by Assyriologists. Nevertheless, the new ideas which it contains make it very profitable reading. The dream of Gudea and its illustrations of Old Testament ideas of the deity; the Babylonian conception of the universe; the genealogy of the Babylonian primæval divinities and their bearing upon the Babylonian and the Hebrew creation-stories, etc., are treated at length. In the course of one of his arguments he touches upon the reason of the Hebrew day beginning at sunset:—

"Winckler confesses: 'Das babylonische Pantheon stellt nicht den Sonnengott, sondern den Mondgott an die Spitze—*warum, ist noch unklar.*' The reason is this: As the chaos

preceded the cosmos, as the darkness the light, thus the *night* precedes the day, and Sin being 'he who governs the night,' must necessarily precede Shamash, who governs the day. This is also the reason why, in early times, the 'day' consisted of '*night* and day'—accepted even by P.: 'there was evening and there was morning, the . . . . day.' This latter, no doubt, is a relic of the Sumerian conception of the day—for among the Sumerians Sin was *the father of Shamash*. . . . . But if the day began with the evening or night, then the *year* must have begun with the *winter*, and the *beginning* of the year could not have been the 21st of March (the 1st Nisan), but must have been the 21st of September (the 1st Tishri). . . . . The present Jewish New Year's month thus goes back to the most ancient times: to the time of the Sumerians."

Whether his conclusions be always soundly based or not, Dr. Radau's book is a most noteworthy monograph, and deserves the special attention of all students of ancient Semitic religious beliefs, which have had such enormous influence in shaping the creeds of the white races of the earth.

T. G. PINCHES.

LA MAGIE ASSYRIENNE; étude suivie de Textes Magiques, transcrits, traduits, et commentés, par C. FOSSEY, Docteur ès-Lettres. (Paris: Leroux, 1902.)

This work consists of 141 pages of matter bearing upon the subject of Babylonian magic (for such it is, rather than Assyrian), followed by 333 pages of translations of the tablets, with notes.

The study of magic (not with the intention of practising it) is one which offers many attractions to the student of Assyro-Babylonian life, manners, and customs. How this superstitious practice entered into the life of all, even the most intelligent, in those days, is well shown by the short letter from an Assyrian king (Aššur-banî-âpli) which M. Fossey quotes, and which, being short, I reproduce here:—

"To the king my lord, thy servant Ištar-šum-êreš. May there be peace to the king my lord. May Nebo and Merodach bless the king my lord. Concerning that of which the king my lord wrote to me thus: 'Is there some curse written therein?' I have made research. No, there is no curse written."

Indeed, the life of the people must have been full of apprehension on account of the different omens attached to the various actions and circumstances of life, not seldom giving them considerable anxiety, and this, when the fates seemed to be entirely adverse, must not unfrequently have led to despair, sometimes leading, as at the present day, to death. To us it seems often strange and unreasonable, this extreme superstition which caused Nineveh to be called "the mother of witchcrafts," but it is not so very many centuries since such things were officially recognized in both Europe and America. In this connection it is interesting to note that sorcery and witchcraft are recognized in the laws of Ḫammurabi, the very first enactments of his code referring to such practices. This, however, is only natural among a people firmly rooted in such superstitions, and has considerable appropriateness, for the enactments in question are against thwarting the ends of justice by such means.

In his essay upon the subject of Babylonian magic which precedes the translation, M. Fossey treats of the sources of his information—the Babylonian and Assyrian tablets; of demons, sorcerers and sorceresses, ill-luck and sickness; divination and the rites attending purification; the rites which destroy; those which transmit; the pharmacopia of magic; oral rites, incantations, and imprecations; preventative rites, amulets, and talismans; the gods and magic; and the position of magic between religion and science. It is naturally a great advance on the late François Lenormant's "Chaldean Magic," which attracted so much attention twenty-six years ago, and may be regarded as the latest word upon the subject.

The translations are in every case accompanied by transliterations of the original texts, and, when bilingual, both

languages are given. They are in the main renderings of inscriptions in the British Museum, and the original texts are mostly given in the second, fourth, and fifth volumes of the "Cuneiform Inscriptions of Western Asia," a work which was prepared for publication by E. Norris, G. Smith, and myself, under the editorship of Sir Henry Rawlinson, one of this Society's most illustrious members.

It is naturally a matter for regret that all the duplicates of Babylonian and Assyrian inscriptions known are not yet published, but this is necessarily a matter of time. The effect, however, is that no edition can at present be complete, and improvement in the not altogether distant future is in many cases almost a certainty. Thus, for instance, on pp. 154–155, ll. 3–5 are completed by a duplicate (Sumerian only), as follows: *Imma* (written *ka*) *ḫula, imma gia, ḫulaḫḫa zae nam-bee* (instead of *zi nam-bea*), *ig nu-ḫalammaene, zi anna ḫe-pa, zi kia ḫe-pa.* Semitic Babylonian, *ṣumu limnu* [*ṣumu târu*?], *gilittu, niš mûtu, ša lâ . . . , niš šamê lú-tamât, niš êrṣiti lú-tamât,* suggesting the translation: "The evil thirst, [the recurrent thirst], terror, the spirit of death which doth not [depart?], spirit of heaven, mayest thou exorcise, spirit of earth, mayest thou exorcise."

For such things as these, however, M. Fossey is not responsible. Moreover, his translations seem to be good, and he has not shrunk from giving renderings of texts in Sumerian only. It is an excellent exposition of the subject, and can be recommended.

T. G. PINCHES.

In the *Recueil de Travaux relatifs à la Philologie et à l'Archéologie égyptiennes et assyriennes*, vol. xxv, Professor Naville has published a very interesting description of the Stone of Palermo ("La Pierre de Palerme"), with translation. This monument, he says, was of Heliopolitan origin, and it gives a list of festivals, the height of the Nile inundation (apparently), and many historical events. Among the things worthy of notice is the fact that two different kinds of year are referred to, and that there was a chronological system

which was independent of the reign of the ruling sovereign. The festivals are themselves often of great interest, those of the union of the North and the South, the foundation of Memphis, the destruction of the Anu, the foundation of Heracleopolis, etc., being mentioned among them. The paper is accompanied by a facsimile and a pen and ink copy of the two sides of the stone.

NOTES OF THE QUARTER.

(January, February, March, 1903.)

I. General Meetings of the Royal Asiatic Society.

February 10th, 1903.—Lord Reay, President, in the Chair.

Major Salmon,
The Rev. Dr. Tilbe,
Mr. P. Pillai,
Mr. C. M. Nair, and
Mr. Imdad Ali

were elected members.

The President gave expression to the great loss sustained by the Society and by Oriental scholarship in the death of Professor Cowell; and on the motion of Professor Macdonell, seconded by Professor Bendall, the following resolution was unanimously adopted:—"That the Royal Asiatic Society of Great Britain and Ireland desires to place on record its deep sense of the irreparable loss to Oriental scholarship from the lamented death of Professor Edward Byles Cowell, and to express its deepest sympathy with the surviving members of the family."

Professor Margoliouth read a paper on the terms "Muslim and Ḥanīf." A discussion followed, in which Dr. Hirschfeld, Mr. Sohrawarthy, Professor Hagopian, and Sir Charles Lyall took part. The paper will appear in the July number.

March 10th, 1903.—Lord Reay, President, in the Chair.

Colonel H. S. Jarrett, C.I.E., and
Mr. Henrik Borgström

were elected members of the Society.

The President gave expression to the great loss sustained by scholarship through the death of M. Gaston Paris. It was resolved that a vote of condolence should be communicated to his relatives and to the Academies to which he belonged.

Dr. Grierson, C.I.E., read a paper on "Tulsi Das." A discussion followed, in which Professor Bendall, Mr. Irvine, and Mr. Bouverie Pusey took part. The paper will appear in the July Journal.

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II. Contents of Foreign Oriental Journals.

I. Zeitschrift der Deutschen Morgenländischen Gesellschaft. Band LVI, Heft 4.

Vollers (K. u. E. v. Dobschütz). Ein spanisch-arabisches Evangelienfragment.

Smith (V. A.). Andhra History and Coinage.

Praetorius (F.). Zur Geschichte der griechischen Alphabets.

Littmann (E.). Koptischer Einfluss im Ägyptisch-Arabischen.

Praetorius (F.). Über einige Pluralformen des Semitischen.

Rothstein (J. W.). Zur Kritik des Deboraliedes und die ursprüngliche rhythmische Form desselben.

Bacher (W.). Jüdisch-Persisches aus Buchārā.

Jacobi (H.). Ānandavardhana's Dhvanyalōka.

Hüsing (G.). Elamisches.

Becker (C. H.). Die Ibn el-Kelbī-HSS. im Escorial.

Fischer (A.). Zur Siloahinschrift.

Kugler (F. X.). Berichtigung.

II. Vienna Oriental Journal. Vol. XVI, No. 4.

Goldziher (I.). Bemerkungen zur arabischen Trauerpoesie.

Speyer (J. S.). Critical Remarks on the Text of the Divyāvadāna.

III. Journal Asiatique. Tome XX, No. 2.

Bel (A.). La Djāzya.

Poussin (L. de la V.). Dogmatique bouddhique.

Basset (R.). Rapport sur les études berbères et haoussa.

No. 3. Table des matières de la 9e série.

III. Obituary Notices.

Professor Cowell.

Not only the greatest Oriental scholar that England has produced, but probably also the most widely learned man of our time, has passed away in the person of Edward Byles Cowell, Professor of Sanskrit in the University of Cambridge, who died there on Monday, February 9th.

Cowell was born at Ipswich, January 23rd, 1826, and was educated at Ipswich School. During his schooldays he used to read in the Public Library, and there in 1841 came on Sir William Jones's works, reading especially the translation of the Sanskrit play "Sakuntalā." "I well remember," he said, in a memorable address given to the Royal Asiatic Society in 1898, "the joy of finding a Persian grammar among his works, and I soon learned the character . . . . and began to study the anthology." From this book, he added, he gave, "thirteen years afterwards, ... FitzGerald his first lesson in the Persian alphabet." In the same year he saw Professor H. H. Wilson's "Sanskrit Grammar" advertised, which he bought not long after. "Of course I found Sanskrit too hard," he continued, "but I returned to Persian meanwhile," reading alone the "Shāhnāmah" and Hāfiz. His first guide in Oriental studies was Colonel Hockley, an old Bombay officer settled in Ipswich, with whom he read Jāmī. On leaving school he at first entered into commerce under his father, and it was in course of business visits to London that he formed the acquaintance of H. H. Wilson, then Librarian of the India

House. He gradually acquired considerable proficiency in Sanskrit; for in 1851 he published a translation of Kālidāsa's play "Vikramorvaśī." His actual systematic study under Wilson commenced, however, only in 1853, as we learn from his address to the Cambridge Electoral Roll. In 1847 he married Miss Elizabeth Charlesworth, and in 1850 entered the University of Oxford, being then obliged, as a married man, to enter a hall (Magdalen Hall), not a college. He took honours both in classics (First Class, Final 1854) and in mathematics, and the University somewhat tardily acknowledged his eminence by the honorary degree of D.C.L. in 1896. In 1856 he was appointed Professor of History at Presidency College, Calcutta, and in 1858 also Principal of the Sanskrit College in the same city. Here he remained till 1864, and laid the real foundation of his reputation as an Orientalist, the happy combination of wide and deep Western culture with the concentrated traditional lore of the Eastern pandit. Unfortunately for the present generation, he was one of the last survivors of this type. The present policy of our Indian authorities in replacing European teachers of Sanskrit in India by natives not only dwarfs critical scholarship in India, but also injures the proper balance of Oriental studies at home. In Calcutta Cowell and his wife were, as everywhere, not only respected, but loved. The present writer well remembers the numerous inquiries from old pupils amongst the natives at Calcutta and elsewhere, who spoke of his doings of twenty and thirty years before as if of yesterday. Foremost amongst these was the now aged Sanskrit pandit Maheśa Chandra Nyāyaratna.

In 1867 Cowell was elected to the Chair of Sanskrit, then just established at Cambridge, where the rest of his life was spent, both as a University professor and a Fellow of Corpus Christi College (1874). Here he taught not only Sanskrit of varied periods and styles (e.g. Indian philosophy, thirty years ago hardly known in the Continental universities), but also comparative philology and Persian. These subjects have now been provided by the University with separate teachers,

and the same has been done for elementary Sanskrit, and justly, so as to economize the lavish expenditure of precious time that Cowell would bestow as freely on the beginner as on the advanced student. His Pali classes, started some five-and-twenty years ago, have resulted in the Cambridge translation of the Jātaka-book, under his guidance. More recently he read Zend with several pupils.

Cowell was pre-eminently a teacher. It was quite characteristic of the man that on the occasion already referred to, when the Royal Asiatic Society conferred on him the first awarded of their series of gold medals for distinction in Oriental learning, he chose in his very opening sentence of acceptance "to recognize in it a sign that he had not failed in his life's old dream of spending his days in teaching." His life was uneventful. Within the last few weeks I inquired of him what he considered its chief events. He replied that the eras in his life were the acquisition and study of certain books. His own mental history may be illustrated by some of his chief works. To the Calcutta period belong his two editions and translations of Upaniṣads, and the text and translation of the difficult work of Indian logic, the "Kusumāñjali." Many native scholars were at the same time encouraged to edit texts which appeared with English introductions by the Professor. Similarly, on his return to England, his first Cambridge pupil, Palmer Boyd, was induced to translate the newly discovered Buddhist drama, "Nāgānanda," which appeared with an introduction by Cowell. To the same time belongs his new edition of the Prakrit Grammar of Vararuci, of which he had issued a first edition in Oxford days. Two important works published in Cambridge days represent the continuance of researches in Indian philosophy begun in India. These are the "Aphorisms of Śā*nd*ilya" (1878), and the "Sarvadarśana-sa*m*graha," translated (portions also by Mr. A. E. Gough) in 1882. Among the more recent of his important works were his text and translation of the "Buddhacarita" (1893–4), a publication which has created great interest amongst critical scholars abroad. Most

characteristic, too, was his work for and with others. He more than once accepted the task, at times ungrateful, of finishing works of deceased scholars. Such were Wilson's version of the "Rigveda" (finally completed by his pupil, Mr. W. F. Webster), and the huge work of Mādhava left incomplete by Goldstücker. His chief works done with others were: "The Black Yajurveda" (edited partly with Dr. Röer), 1858–64; Catalogue of Buddhist Sanskrit MSS. (with Dr. Eggeling), 1875; "Divyāvadāna," edited with the late R. A. Neil, 1886; "Harsacarita," translated with Mr. F. W. Thomas, 1897. Lastly, let it never be forgotten that it was he, the scholar, known to the few, who introduced Omar Khayyam to FitzGerald, whose version is known wherever English literature is known.

To estimate the width of Cowell's attainments one must search through many journals and periodicals. His early article on Persian literature in "Oxford Essays" (1855) must not be forgotten. His profound knowledge of Welsh was well known to Continental *savants*. Remarkable articles by him are to be found in *Cymmrodor*, vols. ii and v. In one of these is contained an elaborate parallel between Welsh poetry and the troubadours. Many of the earlier volumes of the Journal of Philology contain numerous articles from his pen, such as the folklore studies on the tale of Rhampsinitus (1868), on the Chapman of Swaffham (1876), and on the fragments of Greek comedy preserved in Origen (1872). His interest in classical matters was well maintained. Patristic study also contributed at least one interesting discovery regarding Indian philosophy. Probably no living man but he could have discoursed as he did in his presidential address to the Aryan Section of the Orientalists' Congress in 1892 on the parallel between the literature of the Indian Mīmāṁsā and the Talmudic Rabbis. Nor did his sympathies limit themselves to ancient or recondite languages. Italian literature was a favourite recreation; while a well-known authority on Spanish said that Cowell gave him the impression of having devoted himself to nothing else. His last complete work was a selection

of passages translated from an old Bengali poem into English verse, printed only a few months ago. There is also an article by him on a Persian subject in the current number of *Macmillan*. He leaves but little incomplete. The Jātaka-book may safely be left in the hands of two able and experienced pupils, Mr. H. P. Francis and Mr. W. H. D. Rouse, fortunately both in residence at Cambridge. His last elaborate study was one which I induced him to take up, the translation of the "Siddhānta-muktāvalī," on Indian logic. I believe his written translation of it was approaching completion.

Of the retiring, unaffected generosity and sympathy of his character it is impossible for a pupil and a friend of a quarter of a century to speak in terms that would not seem exaggerated to strangers. A scholarly friend writes of him to me:—

"I doubt if I have ever known any other man so wholly free from personal ambition or vanity, or so ready to give his best work to others for the pure love of knowledge."

Let me conclude this inadequate notice with his own words, addressed to his "fellow-workers in a noble cause," the diffusion of the knowledge of all that is good in the East, and that

"by the power which personal enthusiasm and sympathy can always exercise on others. 'Lux ex oriente' is their motto; to help in the diffusion of that light is their work. The several generations of members pass away, but they are continuously linked together by their common aim; and the former and the present members are all parts of one long series,

'Et quasi cursores vitaï lampada tradunt.'"

With still the same thought, he said to a band of pupils who, on his seventieth birthday, presented him with the portrait now hanging in the hall of Corpus Christi:—

"It has been a keen delight to me to hand on the torch to other and younger men, to enter into their hopes and ambitions, and thus to forget one's own limitations and failures in the wider

horizon which opens before them in the future. The teacher's motto may well be

'Serit arbores quæ alteri sæculo prosint.'"

CECIL BENDALL.

(From the *Athenæum.*)

IV. NOTES AND NEWS.

AJANTA FRESCOES.—Dr. Heinrich Lüders, of Göttingen, has succeeded in solving the puzzles of three of these frescoes. They are illustrations of the two Jātaka stories of Kshantivādin and Maitrībala, according to the text of Ārya Śūra's Jātaka Mālā; and have beneath them, in characters of about the sixth century A.D., stanzas taken from that work. The proofs of the discovery, which is of great interest, are contained in an article in the last issue of the "Nachrichten der königlichen Gesellschaft der Wissenschaften" at Göttingen.

THE Royal Asiatic Society, being desirous to give a greater attention than it has hitherto been able to do to the study of Far Eastern questions, is considering the advisability of printing such articles as are contributed to its Journal by scholars interested in the literature of China, Japan, Siam, and the adjoining countries in a separate publication, to be entitled

"THE FAR EAST."

It is proposed to issue *The Far East* at first every six months; and if the project should receive encouragement,

then every quarter. Each issue will contain such illustrations as are necessary for the intelligence of the articles.

The co-operation of leading scholars has already been obtained, and a special committee has been appointed to deal with the details of the scheme.

Each issue will contain, besides original articles, also correspondence, paragraphs of notes and news, and reviews of books.

It is proposed, if sufficient subscribers be forthcoming, to commence with the issue of January, 1904; and the Society will be glad to know what support it will receive in this undertaking.

The *Far East* will be issued gratis to members of the Society. The subscription to the Society is, for those residing fifty miles or more from London, 30*s*. a year. Residents in China or elsewhere who wish to support the Society in this undertaking are requested to send their names to the Secretary, 22, Albemarle Street, London, W.

Messrs. Kelly & Walsh have been appointed sole agents in China and Japan for *The Far East*.

Languages in India.

The following are the latest figures attainable as to the number of living languages in India, and have been drawn up by Mr. Grierson.

The Census of 1901 does not cover the whole of India, and for some of the wildest and most polyglot tracts no language figures are available.[1]

[1] No language-census was taken of the greater part of Baluchistan; of British Afghanistan; of the Swat Kohistan, Chitral, Hunza-Nagar, etc.; and of certain wild hill-tracts in Burma.

Even allowing for this, no less than 147 distinct languages have been recorded as vernacular in the Indian Empire. They are grouped as follows:—

	Number of languages spoken.	Number of speakers.	
A.—Vernaculars of India.			
Malayo-Polynesian Family.			
Malay Group	2	...	7,831[1]
Indo-Chinese Family.			
Mōn-Khmēr Sub-family	4	427,760	
Tibeto-Burman Sub-family	79	9,560,454	
Siamese-Chinese Sub-family	9	1,724,085	
			11,712,299
Dravido-Mundā Family.			
Mundā Sub-family ...	10	3,179,275	
Dravidian Sub-family ...	14	56,514,524	
			59,693,799
Indo-European Family, Aryan Sub-family.			
Eranian Branch	3	1,377,023[3]	
Indo-Aryan Branch ...	22	219,780,650[4]	
			221,157,673
Semitic Family	1	...	42,881
Hamitic Family	1	...	5,530
Unclassed Languages ...	2[5]	...	
Andamanese	...	1,882	
Gipsy Languages ...	...	344,143	
Others	...	125	
			346,150
Total Vernaculars of India	147		292,966,163
B.—Languages of other Asiatic Countries,[1] Africa, Australia			76,673
C.—European Languages...			269,997
Language not returned			947,164
Language not identified, traced, etc.			101,059
Grand Total—India			294,361,056

[1] Excluding Javanese and Malay.
[2] Excluding Daingnet.
[3] Excluding Persian and Wakhī.
[4] Including Daingnet.
[5] These are really two groups, not two languages.

Of these, the Semitic and Hamitic languages are classed as vernaculars, owing to their being spoken in Aden. The rest belong to India Proper. The Indo-Chinese languages are found in the Himalayas, Burma, and North-Eastern India; the Dravido-Mundā ones mainly in the south and centre of the Peninsula; and the Indo-European on the North-Western Frontier, in the Panjab, Bombay, Bengal, Assam, and the country between the state of Hyderabad and the Himalaya.

ORIENTAL RESEARCH IN JAPAN.—A "Society for Oriental Research" has just been founded at Tokyo with the object of studying the languages, literatures, religions, philosophies, etc., of Oriental countries. The systematic study of the Chinese Tripitaka is to be the first work of this Society, which has for its President Dr. G. Tokiwai, and for its Managing Committee Drs. Ueda, Takakusu, and Sayawanagi.

V. ADDITIONS TO THE LIBRARY.

Presented by the Hakluyt Society.

Sinclair (W. F.), with Notes and Introduction by D. Ferguson. The Travels of Pedro Teixeira, with his Kings of Harmuz and extracts from his Kings of Persia. 8vo. *London*, 1902.

Presented by the Trustees of the British Museum.

Budge (E. A. Wallis) and King (L. W.). Annals of the Kings of Assyria. Vol. i. 4to. *London*, 1902.

[1] Including Javanese, Malay, Persian, and Wakhī.

Presented by Major Younghusband.

A MS. of the Timur Nāmah by Hātifi.
A MS. of parts of the Al-Shufa by Ibn Sina.

Presented by the Senate of the Calcutta University.

Mukhopadhyay (A.). Law of Perpetuities in British India. *Tagore Law Lectures*, 1898.
8vo. *Calcutta*, 1902.

Presented by Dr. R. N. Cust.

Inscriptions Sanscrites du Cambodge. Atlas by M. A. Barth.
Aspelin (J. R.). Inscriptions de l'Jénissei.
Müller (E.). Ancient Inscriptions in Ceylon. Plates.
Epigraphia Indica. Vol. ii, parts 12–16.
Archæological Survey of India. South Indian Inscriptions. Vols. i and ii, pts. 1–3; vol. iii, pt. 1.
Conder (C. R.). Altaic Hieroglyphs.
Monier-Williams. Application of the Roman Alphabet to the Languages of India.
Lacouperie (T. de). Orientalia Antiqua. Vol. i, pt. 1.
Thompson (E. Maunde). Handbook of Greek and Latin Palæography.
Archæological Survey of India. North-West Provinces: Jaunpur, etc.
Revue de Philologie et d'Ethnographie. Tome iii.
Bey (E. T. Rogers). Certaines Inscriptions en Caractères configurés Camées.
Charencey (H. de). Déchiffrement d'un Inscription Palenquéene.
Adler (C.). Two Persepolitan Casts in the U.S. National Museum.
Gibson (J. C.). Learning to Read in South China.
Hogarth (D. G.). Inscriptions from Salonica.
——— Apollo Lesmenus.
Heikel (Axel). Antiquités de la Sibérie Occidentale.
Thomson (Vilh.). Inscriptions de l'Orkhon.

Radloff (W.). Alttürkischen Inschriften der Mongolei. Two parts.

Donner (C.). Inscriptions de l'Jénissei.

Rea (A.). List of Ancient Monuments in the Madras Presidency. 1891.

Müller (F.). Der Ursprung der Indischen Schrift.

Taw Sein-Ko. Preliminary Study of the Po-U-Daung Inscription.

The Castle of Lohara.

Literary Evidence of the use of Writing.

Former Derivations of the Brāhmi.

Damant (G. H.). The Old Manipuri Character.

Senart (E.). Corpus Inscriptionum Indicarum.

Müller (F.). Schrift der Malayischen Völken.

Halévy (M.). L'Origine des Ecritures Indiennes.

Indraji (Bhagvanlal). Antiquarian Remains at Sopara and Padana.

Barth (A.). Inscriptions Sanscrites du Cambodge.

Bühler (G.). Origin of the Indian Brahma Alphabet.

Barth (A.). L'Inscription Sanscrite de Han Chey.

Bulletin de Correspondance Africaine. Fasc. vi.

Lacouperie (T. de). Old Babylonian Characters and their Chinese Derivates.

Talbot (H. F.). Four new Syllabaries. Assyrian.

Lacouperie (T. de). Old Numerals in China.

Bayley (Sir E. Clive). Genealogy of Modern Numerals.

Schoebel (C.). Origines de l'Ecriture Alphabétique.

Rapport de la Commission de Transcription. Tenth Oriental Congress.

Tegnin (Es.). De Ariska Sprakens palataler.

Taylor (Isaac). Some Typographical Survivals.

Wulff (F.). Un Chapitre de Phonétique.

Lyttkens & Wulff. La Transcription Phonétique.

Rundell (J. B.). English Spelling Reform. 1880.

Pagliardini (T.). Curiosities of English Spelling.

Murray (J. A. H.). Spelling Reform.

Sprague (T. B.). Causes of Insolvency (Phonetic).

Further Notes on English Spellings.

Partial Corrections of English Spellings.
Ellis (A. J.). Dimidiun Speling.
Soames (L.). Scheme of English Spelling Reform.
Vowels *v.* Diphthongs.
Bell (A. M.). Visible Speech.
Aim and Method of the *Romaji Kai.*
Lyon (H. T.). *Proposed Transcription Table.*
Raghunathji (K.). The *Jubilee Language.*
Symbolization of the *Organic Facts of Universal Speech.*
Campbell (J.). *Translation of Hittite* Inscriptions.
Wright (W.). The Hittites up to date.
Bréal (M.). Déchiffrement des Inscriptions Cypriotes.
Crimean Tombstones.
Kalender für den Orientalisten-Congress. 1889–90.
Petra (G. da). Le Tavolette cerate di Pompei.
Fabretti (A.). Antichissime Inscrizioni Italiche. 3° Supplemento.
Simone (L. G. de). Note Japigo-Messapiche.
Palæographical Society. Facsimiles. London, 1875–1884. Oriental Series, parts 1–8; Series ii, pt. 1.
Grotefend. Discovery of Cuneiform.
Revue de Philologie. Tome iii. 1878.

Presented by the Author.

Johnstone (P. de Lacy). The Raghuvamça, the Story of Raghu's Line by Kalidasa. 8vo. *London*, 1902.

Presented by the Publishers.

Oldenberg (H.). Le Bouddha, traduit par A. Foucher, avec une préface de M. Sylvain Lévi. 8vo. *Paris*, 1903.
——— La Religion du Véda, traduit par V. Henry. 8vo. *Paris*, 1903.
Budge (E. A. Wallis). The Histories of Rabban Hormizd the Persian and Rabban Bar-'Idtâ. 3 vols. Vol. i: Syriac Texts. Vol. ii: English Translations. Vol. iii: English Translations of the Metrical Life of Rabban Hormizd by Sergius of Âdhôrbâîjân. 8vo. *London*, 1902.

Lajonquière (E. Lunet de). Inventaire Descriptif des Monuments du Cambodge. 8vo. *Paris*, 1902.

Fanshawe (H. C.). Delhi: Past and Present. 8vo. *London*, 1902.

Vlieger (A. de). Kitâb al Qadr. 8vo. *Leyde*, 1903.

Pischel (R.). Materialien zur Kenntniss des Apabhraṃśa. 4to. *Berlin*, 1902.

Littmann (Enno). Neuarabische Volkspoesie. 4to. *Berlin*, 1902.

Presented by Mrs. Gibson (the Editor).

The Didascalia Apostolorum in Syriac and English. 2 vols. Horæ Semiticæ, i, ii. 4to. *Cambridge*, 1903.

Presented by Professor Windisch.

Böhtlingk (O. v.). Ueber einen Imperativ अवतात् in einem buddhistischen Werke. Pamphlet. 8vo. *Leipzig*, 1902.

Presented by the Trustees of the Parsee Punchayet Fund.

Arda Viraf Nameh. The original Pahlavi text, with introduction, notes, Gujarati translation, and Persian version of Zartasht Behram in verse, by D. K. D. J. Jamaspasa. 8vo. *Bombay*, 1902.

Presented by the Société Finno-Ougrienne.

Ramstedt (G. J.). Über die Konjugation des Khalkha-Mongolischen. 8vo. *Helsingfors*, 1903.

Nielsen (K.). Die Quantitäts verhältnisse im Polmak-lappischen. 8vo. *Helsingfors*, 1903.

Presented by W. R. Macdonnell, Esq.

Saṃvega Vatthu Dīpanī.
Dhammapada.
Caturārakkha.
Kaya-Paccavekkhaṇā.
Dhammapada-Desanā.
Araññakorāda.

Burmese Grammatical Primer.
Mahosatha Vatthu.
Dvatliṃsākara Dīpaka.
Mani Meda Jolāka.
Ajjhatta Jaya Manjalam.
Maha Mangala Sutta.
Ratana Pañjaram.
Decisions of the Princess Thoodamasasi.
Pirit Book.
Maha Satipputṭhāna.
Sankhāra Bheda Bhājanīya.
Loka Myut Mhan Kyuna.
Aṭṭhika Kammaṭṭhana.
Candima-suriya-paritta.
Nami Zat.
Ġun teḷ phrat.
Zaneta Zat.
Kavi Lakkhaṇa Dīpanī.
Judson (A.). Burmese Grammar.
———— Burmese Dictionary.
Henty (W. E.). Mahanthatha Vatthu. Translated.

JOURNAL

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ART. XV. — *The Statue of Amida the Niorai*[1] *in the Musée Cernuschi.* By F. VICTOR DICKINS.

IN the following pages I submit a translation of the Chinese inscriptions engraved on the noble bronze image or statue of the Amida[2] Buddha, which is the glory of the Musée Cernuschi,[3] together with some particulars descriptive and historical. I have, however, paid little attention to Buddhism, and the few explanations of Buddhist terms I offer must be regarded as merely tentative. One object of the present paper is to elicit information on the many points of interest suggested by the inscriptions from members of the Society who are versed in things Buddhist.

The statue was brought from Japan in 1871 by the late M. Henri Cernuschi,[4] and is the largest and finest example of Oriental bronze statuary work in Europe.

[1] Niorai is the Japano-Chinese equivalent of Tathāgata — the Perfect One. But Niorai means 'one who has come in like manner,' i.e. with previous Buddhas.

[2] Amitābha.

[3] Parc Monceau, Paris.

[4] The inventor of the expression 'bimetallisme,' and the ardent apologist of that now dormant doctrine. He died in 1896, leaving his beautiful house in the Avenue Velasquez, together with his unequalled collection of Japanese bronzes and ceramics, to the city of Paris. A man of singularly noble and generous character, his sweetness of disposition won him a large circle of devoted friends, to whom his memory will be ever dear. At my suggestion he caused a copy of the inscriptions to be made, which at his request I translated *into French*. Unfortunately the manuscript, which was sent to him only a day or two before his somewhat sudden death, was mislaid, and the present version is an entirely new one.

The following details I owe to the kindness of M. Causse, the present able and courteous Director of the Musée. The height of the statue from the base of the Lotus, on which the figure is represented as sitting in one of the mystic attitudes,[1] to the highest point of the nimbus is 14 feet 8 inches. The breadth from knee to knee is 11½ feet. The whole rests now on a carved, open-work, octagonal support of oak, 10 feet high and 11½ feet in diameter. On the purchase being effected men were at once set to work to take it to pieces, and the various portions were packed in eleven cases, which were immediately put on board a Messageries steamer and sent to Paris, where ultimately the statue was restored by the famous house of Barbedienne, and was exhibited at the Palais de l'Industrie in 1873–4, at the time of the first meeting of the Congrès des Orientalistes, before removal to its present home.

The original seat of the statue was within the precincts (*keidai*) of the *tera* or monastery of Hanriu (the Coiled Dragon[2]), in the village or suburb of Meguro, a few miles direct west of Shinagawa, the western approach of Tōkiō. Meguro is famous as the burial-place of the devoted girl Komurasaki and her very second-rate lover Gompachi, whose story is excellently told in Lord Redesdale's Tales of Old Japan. The general appearance and attitude of the Buddha, cross-seated on the usual lotus-flower, are accurately rendered in the woodcut opposite, which is a facsimile of the one occupying pp. 46 v° and 47 r° of the 7th part (*Ken* iii) of the well-known *Yedo Meisho* (Famous Places in and near Yedo). From that superbly illustrated work the following description is extracted:—

"The Tera of Hanriu on Rei-un Zan (Spirit-Cloud Hill), also known as the In of Anyō (Peace and [religious] Nourishment). It is situate on the right one chō (1/15 mile)

[1] The various attitudes of Buddhist images, chiefly of the hands and fingers, have an esoteric meaning, of which I refrain from attempting to give any explanation.

[2] Such as is often represented curling round a sword resembling the weapon usually borne by the idol Fudō (Akshara or Vāirōkaṇa).

○播龍寺
○嵯峨天祠

beyond the bridge along the *Nishi-minami* (South-West) Road. A dependency of the monastery of Emu (En) Zan, it belongs to the Jōdo (Pure Land) sect.[1] The *honzon* (principal object of reverence) is a statue of Amida the Niorai, the work of Jikaku Daishi.[2] The monk who founded the monastery was the *Riū-yo* (Dragon-fame), his Reverence (*oshō*) Ichi-u Rei-un (Spirit-Raincloud) of the shrine of Gin-ren (Chant of the Lotus), upon retirement from the In of Taikwō (Great Light) at Nitta, in the province of Kōzuke. Within the precincts is a statue in bronze of Amida Nyorai six *jō*[3] high (60 feet). Behind is a cliff or high bank, at the foot of which is seen the opening of a cave, within which is seated an image of the goddess Benzaiten,[4] said to be the work of Kōbōdaishi.[5] The principal shrine (of the goddess) is within the *tori-i*.[6] On the tablet fixed on the main entrance is written the name Anyō In from the pencil of his Reverence Ōbaku Tokutan."[7]

The statue is seated on a lotus-flower of thirteen petals, each one of which bears inscriptions in Chinese. Round the head is a fine nimbus of later date than the statue. On the central petal in front, within the left[8] half, is the invocation in large characters (repeated on every petal, often twice):—

[1] According to the doctrine of the Jōdo, salvation through Amida can only be attained after the removal of all carnal and worldly desires shall have opened a path to the grace of the Buddha.

[2] This, of course, is mere myth, if not mere invention. Jikaku Daishi flourished in the ninth century; the temple was founded in 1677. See second edition (1884) of the Handbook to Central and Northern Japan prepared by Mr. (now Sir Ernest) Satow and the late Lieut. Hawes, R.M.L.I.

[3] This is, of course, a great exaggeration, even including the stone-faced base on which the statue was originally placed.

[4] Or Benten, one of the seven gods of Fortune (Shichi Fukujin), a manifestation of Vāirōkaṇa or Dainichi the Niorai. See Handbook cited above, p. 58.

[5] The great teacher Kōbō (Propagator of the Law) flourished in the eighth century. A very interesting account of him will be found in the Handbook (which contains a vast amount of Shinto, Buddhist, historical and legendary lore), p. 415.

[6] Tori-i, written and usually understood as bird-perch; originally the perch for the cocks who greet the sun near Shinto shrines, now the imposing open portals distinctive of the approach to a Shinto shrine. This is much the more picturesque explanation. Other explanations, purely prosaic, have been suggested.

[7] A Chinese monk, Yin-yüan, who founded a sub-sect Ōbaku of the Zen sect in the seventeenth century. See Handbook, pp. [89] and 381.

[8] Right and left refer to the figure, not to the spectator.

NAMU AMIDA BUTSU.
Hail, Amida Butsu!

To left of the invocation—

"The In[1] of Chi-on (Wisdom and Grace), the mother-monastery of the two Sō[2] under the 47th abbacy [from the foundation]."

To right—

"Shōyō[3] Nioku Gyō-a Kenchō,"[4]

under which is the Abbot's *kakihan*, a peculiar (Japanese) form of seal.

The right half of the central petal is occupied by the Dedication, the translation of which follows:—[5]

"The pious dedication of a sacred statue in golden bronze of the Holy Amida the Niorai, erected on a pedestal shaped like a Ran flower[6] within the Court of the Tera of Hanriu (Coiled Dragon), situate on the Holy Hill of Rei-un (Spirit-clouds) in the district of Ebara in the province of Musashi. In the Holy Chapel of the Tera of Zenkō (Righteousness and Enlightenment), in the province of Shinano, on forty-eight occasions have prayers been reverently offered, at crossways and on all ways have collections been made, year by year, coin by coin have

[1] *In* 院 and *tera* or *ji* 寺 are both usually translated monastery or temple. The precise difference between these terms cannot be stated. *In* seems more modern, *tera*, which Mr. Aston identifies with Korean *chŭl*, more ancient, the former a more dignified appellation than the latter. There is no distinction between regular and secular clergy in Japanese Buddhism. *Tera* and *in* are commonly translated temples or monasteries. Strictly, they are neither in a Western sense, and it is best to use the terms themselves.

[2] The provinces of Kazusa and Shimōsa.

[3] *Shōyō* seems to be a title; the characters = Shining Fame.

[4] Of *Kenchō* the value is doubtful. The characters = perceive, excel.

[5] The closing sentences of the Dedication are somewhat obscure, but it is believed that the translation is not inaccurate.

[6] 'Ran' is some kind of orchid. For some reason it is often used when lotus is intended.

funds been painfully gathered, and thus has it become possible to found this image of golden bronze, and to complete and instal this Buddha in pious honour of Amida the Niorai. May all the congregation of the faithful in this parish for ever chant hymns of praise and joy, may they gaze upon this statue and pray to the Niorai and attain the limits of this life, and may all and all equally as they pass over those limits reap the reward of their piety, for who would not hasten to be born again in that other Land?

"The Suppliant (*negai-nushi*) Seiyō, a dweller in Yedo, in pious humility presents this Dedication.

"Under the abbacy of the third Abbot since the Restoration of the Tera of Hanriu.

"For the Very Reverend [1] the Ginyō,[2] the Reverend [3] Zui-un."

SECOND PETAL (left of Central).

In the centre, the invocation "NAMU," etc., accompanied by—

"The 38th Kwanshu (Chief Priest) of the Tera of Zōjō (Increasing Excellence), the Dai Sōjō.[4] By his Order."

Here follow a *kakihan* and two seals (not decipherable). Below—

"Yamato House (probably sign of a shop) at Meguro (village or suburb west of Tokyo). The eldest son (of the House?) . . . Gorō. The second son . . . Rōheimon."

To left (upper series of five columns)—

"Benefactor—Godai Tomosada of the family Ueno."

Then follow the *kaimiō*,[5] as under—

"The *Koji*,[6] the Shinyō Ikkwan-ku of the In of Daizen (Supreme Goodness).

[1] *Shōnin*, 上人, superior.

[2] A titular prefix? The characters mean chant-praise.

[3] *Oshō* = *hoshang*, *upadhyāya*, but used as above both in China and Japan.

[4] Often rendered Archbishop, more properly perhaps Grand Superior or General.

[5] Posthumous religious name, lit. renovated name.

[6] For the Buddhist titles and names see below, pp. 444–446.

The *Daishi*, the Engyō Kakushō of the In of Chikyō (Mirror of Wisdom).

The *Shinshi*, Sōgaku Eishin.

The *Shinnio*, Shuoku Gekkei.

The *Hōni*, Miōrin.

Dōkyō of the Zenjō sect.

For the salvation of the souls of the above six relatives now *bodai* (bōdhi = knowing salvation).

For the salvation of all the souls equally of deceased believers."

Middle series of fifteen columns, and a lower series of twelve columns, of *kaimiō*—

"The *Koji* Kaku-ō Dōshō of the In of Tessō,[1] two *Koji*, three *Daishi*, two *Bikuni*, six *Shinshi*, three *Shinnio*, one *Dōji*, two *Dōjo* (Dōnio), two members of the *Zenjō* sect, and one *jo*."

Five of the above are *shaku*, and seem to be *kaimiō* of members of the family of Ozawa Sakubei. At the end of the lower series—

"All the souls of the Ancestors of the Murata Family."

To right are four series of columns, from above downwards.

1st series: uneffaced *kaimiō*: two *Shinshi*, one *Shinnio*, two *Dōnio* (or Dōjo). Two *kaimiō* are more or less effaced. One—Gen-an—is doubtful.

2nd series: one *Shinnio*, two *Dōji*.

These two series seem to intermingle.

3rd series: one *Koji*, two *Shinshi*, one *Shinnio*, one *Shinbiku*, one member of Zen sect.

4th series: two *Shinshi*, four *Shinnio*, one *Oshō*, and one *Hōin*.

Some of the above are *kaimiō* of members of the Murata family.

[1] Tetsu-so = Iron-face, or perhaps Iron Buddha-masks.

Third Petal.

In the centre and above, "NAMU," etc. Below the invocation, a *kakihan*. To left, the 39th Shuhō[1] (Master of the Law) of the Tera of Zōjō. To right, the Dai Sōjō, the Kakuyō[1] Enkan Sho-a;[1] to right of the last column, a tripod with a *kin* (bronze bowl used as a gong) containing its baton. Below, a long list of *kaimiō* in four series (partly effaced), one above the other: twenty-three *Shinshi*, eighteen *Shinnio*, eight *Dōji*, three *Dōnio*, one *Koji*, several *Biku*, *Daishi*, *Bodai*, *Zenmon* (member of Zen sect), and other Buddhist designations, such as Tsūteki (Aim attained), *Myōsen* (Genius), etc. There is also mention of "All the souls of the Ancestors of," apparently a person whose *kaimiō* is given as the Tōyō Rishun. At the end, prominently, the *Daishi* Kaoku Rikun of the In of Myōgen (Admirable Austerity). To right of the last, "Returned to the origin of things the *Shinshi* Hakushin Jōkei"; below is a lotus with the characters above it 'rei-i' (here the Spirit standeth). Lastly, the *Biku* Zenshin, a *Bodai* born in the village of Ichinomiya (county of Kanra in Shimotzuke) of the family of Kuroyanagi. Chōsu (Elder?).

Fourth Petal.

In the centre, "NAMU," etc. Below the invocation the characters "Kenchō,"[2] of which the value here is not apparent, over a *kakihan*.

Left—

Kaimiō of two *Shinshi* and five *Shinnio*, each with the prefixed title *Shaku*.

Right—

Kaimiō of three *Shinshi* and two *Shinnio* of the Tanaka family, all intituled *Shaku*.

[1] See Buddhist titles, etc., below.
[2] See above, p. 436.

In large characters on either side of the invocation—

"The Shōyō Nioku Giō-a [1] of the In of Dentsū" (Propagation of the Tradition).

Fifth Petal.

The invocation "NAMU," etc., is repeated on either side in large characters. Accompanying the left invocation are inscriptions to the effect—

"Province of Shimōsa, Prefecture of Namami, Tera of Daigan (Great Rock), the twentieth Abbot, the Unyō Washun." Follows his *kakihan*.

Accompanying the right invocation are inscriptions to the effect—

"Province of Musashi, Prefecture of Fukagawa, Tera of Reigan (Spirit-Rock), the eleventh Abbot, the Tōyō Chōei." Follows his *kakihan*.

Sixth Petal.

The invocation "NAMU," etc., is repeated on either side in large characters. Accompanying the left invocation are inscriptions to the effect—

"Province of Musashi, Prefecture of Kawagoye, Tera Renkei (Fragrancy of the Lotus), the 19th Abbot, the Shōyō Senrei." Follows his *kakihan*.

Accompanying the right invocation are inscriptions to the effect—

"Province of Shimōsa, Prefecture of Yūki, Tera of Kōkei (Propagation of the Scriptures), on the Hill Juki (the Long-lived Tortoise), the 25th Abbot, the . . . . yō Kwakushun" (character imperfect). Follows his *kakihan*.

Seventh Petal.

Two invocations, "NAMU," etc., arranged as on the Sixth Petal, with inscriptions to the effect:—

[1] See under Central Petal.

On the left—

"The 22nd Superior . . . " (name and monastery illegible).

On the right—

"The 18th Superior of the Tera of Dainen (Great Prayer), on the Hill Shōjō (Righteous Decision), the Shōyō." Follows his *kakihan.*

EIGHTH PETAL.

Invocations, "NAMU," etc., and inscriptions as on preceding Petal.

Left—

"The 25th Superior of the Tera of Shōgwan (Victorious Prayer), on the Hill Tenshō (Celestial Glory), the Seiyō Kojun." Follows the *kakihan.*

Right—

"The 21st Superior of the Tera of Tōzen (East-advance),[1] on the Hill Buppo (Law of Buddha), the Kaizō Ryōdō." Follows the *kakihan.*

NINTH PETAL.

Invocations, "NAMU," etc., and inscriptions as on preceding Petal.

Left—

"Province of Musashi, Prefecture of Takiyama, Tera of Daizen (Great Virtue), under the In of Ōjō (Former Life?) on the Hill of Kwanchi, the 19th Superior, the Sonyō Ryōhan."[2] The *kakihan* follows.

Right—

"Yedo, Honjo. The In of Sonkyō (Admirable Doctrine) and the In of Reizar (Spirit Hill), on the Hill Jōzai (Ever-existing), the 8th Abbot, the Very Reverend the Kōyō Dansatsu (?)." Follows the *kakihan.*

[1] The meaning is doubtful.

[2] Two characters follow, one Ten (heaven), the other illegible.

Tenth Petal.

Invocations, "NAMU," etc., and inscriptions as above.

Left—

"Province of Musashi, Asakusa, Kandá Hill, In of Hanryu (Coiled Dragon), the 18th [Superior?], the Shōyō Shinsatsu." Follows the *kakihan*.

Right—

"Province of Musashi, Iwazuki, Butsugan Hill (Eye of Buddha), Tera of Jōkoku (Pure Country), the 19th [Superior?], the Teiyō Enryu." *Kakihan*.

Eleventh Petal.

Invocations, "NAMU," etc., and inscriptions as above, with some additions.

Left—

"The 29th Superior of the In of Daikwō (Great Light), on the Hill Gichō (Accumulation of Righteousness), the Tsūzō Sekisai Atonshu." Follow a *kakihan* and two seals.

Right—

"The 38th Superior of the Tera of Kōkei (Propagation of the Scriptures), at Iinuma [in Shimōsa], the Kenyō Fugiaku Ōteki."

There is no *kakihan*, but the *kaimiō* of three *Shinshi*, one *Shinnio*, and three *Shinni* are given in the lower right-hand corner of the petal.

Twelfth Petal.

Invocations, "NAMU," etc., and inscriptions as in last.

Left—

"The 58th Superior of the Tera of Kwōmyō (Shining Brilliance), on the Hill Tenshō (Celestial Radiance), the Giyō Kwan[shuku?]." Follows the *kakihan*.

To left of above are the *kaimiō* of one *Foji*, three *Shinshi*, four *Shinnio*, and a monk of the In of Myōgen. Two of the *Shinshi* are *shaku*.

Right—

"The 35th Superior of the Tera of Jōfuku (Constant Happiness), on the Hill Sōchi, the Enyō Jiku Junko Riten." Follows a very complicated *kakihan*.

Nimbus.

On the nimbus is engraved another series of groups of *kaimiō* similar to those inscribed on the petals of the Lotus, but without the invocation *Namu Amida Butsu* and without *kakihan*. The columns of Chinese characters (there are none other) are arranged concentrically with the circumference of the nimbus. Here, as on the Lotus petals, the engraving is most carefully executed, and the characters are beautifully formed. The groups of *kaimiō*, twenty in number, are separated by equal interspaces and symmetrically disposed along the two demicircles, with wider interspaces above and below. In the lower of the wider interspaces is engraved the name of the founder who cast the statue:—"Iseya Chōbei Minamoto Masamitsu, corner of Daimon Road, Yedo." But there is no date, and the name of the founder is not contained in the *Nihon Jinmei Jisho* (Dictionary of National Biography).

Beginning from below and passing leftwards of the figure, the groups of *kaimiō* follow as under:—

1st group: 4 *Shinshi*, 2 being *shaku*.
2nd „ 1 *Shinshi*, 1 *Shinnio*, and 1 *Dōji*, all *shaku*.
3rd „ 3 *Shinshi*, 1 being *shaku*.
4th „ all the characters (with two exceptions) are effaced.
5th „ 3 *Shinshi*, 1 *Shinnio*.
6th „ 1 *Shinshi*, 1 *Shinnio*, 2 *Dōji*.
7th „ 3 *Shinshi*, 1 *Hōshi*.

8th group: 3 *Shinshi*, 1 *Shōnin* (Very Reverend), also the Most Reverend the Archbishop and Grand Priest Dōa Kūgwatsu.

9th „ 1 *Shinshi*, 2 *Shinnio*, 1 *Shōnin*.

10th „ 1 *Shinnio*, 1 *Shōnin*, 1 *Dai Sōjō*, and the souls of all the generations of the family of Kitamura.

11th „ 1 *Shinshi*, 1 *Koji*. The souls of the ancestors of the families of Seki, Wada, and Yokoyama. The Rengwan family (or the individual Rengwan) and the name and titles of a priest or monk.

12th „ 1 *Shinnio*, 1 *Daishi*.
Groups 11 and 12 run into each other.

13th „ this consists of two long concentric and parallel columns and a shorter one in succession.
1 *Shinshi*, 1 *Shinnio*, the Rector under the 4th [Superior] Chihon Riōkū, the Reverend Dōyō (Ringo Kwo Dai-se-shu).[1] The second *Se* (Benefactor) or Vice of the preceding. The families of Tanabe and Nakada.
(This was on a fortunate day in the 11th month of the 2nd year of Kiōwa, January, 1802.)

14th „ 1 *Shinshi*, 2 *Shinnio*, a fourth *kaimiō* is partly effaced. All are *shaku*.

15th „ 1 *Shinshi*, 1 *Shinnio*. Both are *shaku*.

16th „ 1 *Shinshi*, 1 *Shinnio*. The souls of all the generations of the families Tanabe and Nakada.

17th „ 2 *Shinshi*, 1 *Shinnio*. All are *shaku*.

18th „ 3 *Shinshi*, 1 *Dōji*. All are *shaku*.

19th „ 1 *Shinshi*, 1 *Shinnio*, 2 *Dōji*. All are *shaku*.

20th „ 1 *Shinnio*, 1 *Dōji*, 2 *Dōnio* (Dōjo). All are *shaku*.

The titular prefixes to the above *kaimiō* are almost all compounds of the character 譽 *yō*, 'praise,' 'fame,' with one

[1] Meaning dubious. "The Ringo (behind the Tchakra), the Shining, the Chief Benefactor," is merely a tentative explanation.

of the following characters:—吟 *gin*, 'chant,' 'intone'; 生 *sei*, *-djati*, 'life'; 性 *sei*, 'human nature' or 'disposition'; 靜 *sei*, 'peaceful,' 'retired'; 義 *gi*, 'faithful,' 'righteous'; 衍 *en*, 'abundant'; 堅 *ken*, 'firm,' 'solid'; 海 *kai*, 'sea,' 'vast'; 馨 *kō*, 'fragrant'; 尊 *son*, 'honourable,' 'excellent'; 通 *tsū*, 'penetrating,' 'pervading'; 心 *shin*, 'heart,' 'mind'; 圓 *en*, 'round,' 'full'; 諦 *tei*, 'judge,' 'discern'; 運 *un*, 'circulate'; 照 *shō*, 'shining.'

釋 *shaku*, one of the characters of Shaka Muni (Sākya Muni), denotes a monk or priest.

The designations that follow the *kaimiō* are:—

居士 *Koji*, upāsaka, 'a parishioner.'
信士 *Shinshi*, 'believer,' equal perhaps to 'communicant.'
信女 *Shinnio*, 'believer,' 'female.'
大姉 *Daishi*, great elder sister.
法尼 *Hōni*, designation for a nun, as understood in Japan.
比丘 *Biku*, 'professed mendicant monk,' Bhikchu.
比丘尼 *Bikuni*, 'nun,' not necessarily secluded.
信比丘 *Shinbiku*, 'believing monk.'
童子 *Dōji*, 'youth,' 'adolescent.'
童女 *Dōjo* (Dōnio), 'girl,' 'young woman.'

Of the *kaimiō*, which are those probably of deceased subscribers or parishioners, or of deceased relatives of living subscribers and parishioners, I have not thought it advisable to transcribe all. A few are appended, taken as fairly characteristic from the lists on the second and third petals. The *kaimiō*, it will be seen, are composed of two vocables, and remind one of Greek and Hebrew names, with the difference that the former mostly relate to martial or civil qualities, the latter to relations with a personal God, while the Buddhist names designate moral or pious states.

Dōshō, 道正, 'Upright in the faith.'
Seikō, 清香, 'Pure fragrance.'
Chōjun, 長順, 'Continued obedience.'
Miōkiu, 妙休, 'Mysterious or Delicious repose' (i.e. beyond human conception).

Hōgo, 法 悟, 'Discernment of the law.'
Chishō, 智 正, 'Wisdom and uprightness.'
Kwōren, 光 蓮, 'Shining lotus.'
Dōju, 道 樹, 'Tree of the law.'
Kwōgetsu, 光 月, 'Shining moon.'
Dōkiku, 道 菊, 'Chrysanth of the law.'
Jusō, 壽 柊, 'Everlasting pine.'
Jōkwō, 淨 光, 'Pure light.'
Jōhon, 淨 本, 'Pure source.'
Rōon, 辰 穩, 'Excellent peace.'
Shuntetsu, 春 徹, 'Spring path' (path to renewed birth).
Renchu, 蓮 中, 'Midmost the lotus.'

ART. XVI.—*Tulasī Dāsa, Poet and Religious Reformer.* By G. A. GRIERSON, C.I.E., Ph.D., D.Litt.

[*Read at a Meeting of the Royal Asiatic Society on March 10th*, 1903.[1]]

MUCH of what I shall say to-day will be familiar to those members of the Society who have lived in Northern India. A good deal has been written about Tulasī Dāsa, but it has always been addressed to a comparatively small audience—those directly interested in the details of modern Indian folk-religion. I therefore gladly take this opportunity of repeating on a larger stage what has been said before. Tulasī Dāsa is surely deserving of more notice than is usually bestowed upon him in histories of the development of the religious idea in India. He was not merely a reformer who stirred the emotions of his contemporaries and then went his way. He wields greater influence at the present day than when he died two centuries ago. Modern Hinduism has many forms and many beliefs, and yet the character of every Hindū of Upper India has been moulded in part by his teaching.

Professor A. Weber commenced one of the last essays which came from his pen with the following words:—

> "The great charm of the science of natural philosophy lies in the opportunities which it offers for observing the development from first to last of a single germ; so also, in the study of the history of religion, are we

[1] Except for a few notes and the appendixes, this lecture is given exactly as it was delivered. If it induce a few students to wander in the magic garden of Hindī poetry, I shall be amply rewarded. I have never known anyone to enter it without succumbing to its enchantment.—G. A. G.

enabled to follow the different phases undergone by an idea from its first inception to its culminating point. But between the two cases there is this great distinction; that, while in the domain of nature everything develops from that which is simple to that which is perfect, in the history of religion it is often exactly the reverse. Here, that which is at the beginning is not only simple, it is also The Better, The Right, The True. But, in the course of its development, foreign elements continue to make their influence felt, till, when we reach our goal, we are often confronted with something altogether opposed to the propositions from which we started. Superstition has made itself master of the situation, and, like the fabled mermaid, we see 'a lovely maiden ending in an ugly fish.'"

Taking this as his text, Professor Weber traced the corruption of the religions of India. I venture, however, to think that he was too pessimistic. To my mind the religion of Northern India is marked by two great steps forward — Buddhism and, two thousand years later, the teaching of Tulasī Dāsa. The practical result of the Buddha's teaching was the acceptance by all India of the belief in the universal brotherhood of Man. Tulasī Dāsa added to this the belief in the universal fatherhood of God.

No doubt many of you will remember Dr. Thibaut's luminous account of the Vedānta doctrine of Rāmānuja, which was delivered in this room last year, and I need not go into details concerning it. Suffice it to say that, unlike those to whom it seemed (as Dr. Thibaut says) "sweet to be wrecked on the Ocean of the Infinite," Rāmānuja taught of a Supreme Deity, endowed with every possible gracious attribute, full of love and pity for the sinful beings who adore him, and granting the released soul a home of eternal bliss near him—a home where each soul never loses its identity, and whose state is one of perfect peace. In his infinite love and pity he has on

occasions become incarnate in various forms for the salvation of mankind, and his fullest and most noble incarnation was that of the Great Example, Rāma Candra.

The teachers of this sect were necessarily Brāhmaṇs, and the strictest rules regarding eating, bathing, and dressing were laid down by the founder. Nor were its members very popular in Northern India, its tenets being rather of a speculative than of a practical nature. About three hundred years later, early in the fifteenth century, we come upon Rāmānanda, a prominent member of Rāmānuja's school. According to tradition he spent some time travelling through various parts of India, after which he returned to the residence of his superior, Rāghavānanda. His brethren objected that, in the course of his peregrinations, it was impossible that he could have observed that privacy in his meals which is a vital observance of the Rāmānuja sect; and, as Rāghavānanda admitted the validity of the objection, Rāmānanda was condemned to feed in a place apart from the rest of the disciples. He was highly incensed at this order, and retired from the society altogether, establishing a schism of his own.

I have mentioned this at some length, because the insult offered to Rāmānanda was destined to result in one of the greatest religious revolutions which India has seen. Rāmānanda gave his disciples a significant name — Avadhūta, or Liberated. They had 'shaken off' the narrow fetters imposed by Rāmānuja on his followers, and all castes were equally admitted to fellowship. His twelve chief disciples included, besides Brāhmaṇs, a Musalmān weaver (the wise and witty Kabīr), a leather-worker, a Rājput, a Jat, and a barber. He no longer preached to Brāhmaṇs only, or in Sanskrit. "The common people heard him gladly," for he taught them in their own tongue, and the first great writers of Mediæval Hindōstān were his immediate disciples. Seventh in descent from Rāmānanda, in succession of master and pupil, came Tulasī Dāsa, who flourished in the latter half of the sixteenth and the commencement of the seventeenth century.

It is worth while noting that just about this time a great stirring of religious feeling was also occurring in the West, and due to a similar immediate cause — the diffusion of the Scriptures in the vernacular. Luther's Bible appeared between 1522 and 1534, and Tindale's New Testament in 1525. It was these that established the Reformation in Europe, just as the Buddha's preaching in the vernacular had established Buddhism, and as the preaching by Rāmānanda in the tongue of the people paved the way for Tulasī Dāsa.

Regarding the facts of this poet's life we know but little. According to tradition he was born in 1532. He was a Sarayūpārīṇa Brāhmaṇ (a clan which traces its foundation directly to Rāma Candra himself), and he tells us that he was one of those unfortunate children, born under an unlucky star, called *Abhuktamūla,* who was abandoned, as was customary in those days, by his parents. He was picked up by an itinerant *Sādhu,* who adopted him as his disciple, and gave him a moderate education. We know the names of his preceptor and of his immediate relations. He married and begat a son who met an early death, and after that, it is said at the instigation of his wife, he became a wandering Vaishṇava. He commenced writing his great work, the Rāmāyaṇa, in the city of Audh, when he was 43 years of age, and subsequently, owing to a difference with his co-religionists on a point of discipline, moved to Benares, where he finished it. He was attacked by plague in that city in the year 1623, and died the same year, though apparently not from the disease.

Some score of works are attributed to him, but only twelve, six greater and six less, are certainly his. The most noteworthy are the Rāmāyaṇa, the Gītāvalī, the Kavittāvalī, and the Vinaya Pattrikā. I have selected these four names on account of the various aspects of his poetic powers which they illustrate. Commentators say that there are three ways of looking at Rāma: we may look at the tender side of his character (*mādhurya*), its majestic side (*aiśvarya*), and its complex side (*miśrita*), in

which tenderness and majesty are combined. There are four ways of singing his praises: as a *māgadha* or panegyrist, as a *vandin* or bard, as a *sūta* or *paurāṇika*, i.e. a historical poet, and as an *arthin* or suppliant.

A work in which the complex view of Rāma's character, together with his glory and his power, is celebrated is called a *carita*, and is sung by a *sūta*. His tenderness should be sung by a *māgadha*, and his majesty by a *vandin*; while entreaties addressed to him should be sung by an *arthin*.

The most famous of Tulasī Dāsa's poems is undoubtedly the Rāmāyaṇa, or, to quote its full name, the *Rāma-carita-mānasa*, the Lake of the Deeds of Rāma. Its name shows that it is a *carita*. The poet writes in the character of a *sūta*, and deals with the complex side of his hero's character. To put the fact in line with our English ideas, we may say that it corresponds to an epic poem. I do not think that there can be any doubt as to its reputation being deserved. In its own country it is supreme over all other literature, and exercises an influence which it would be difficult to describe in exaggerated terms. It is by no means a translation of Vālmīki's older work, but is an independent story, built on the same foundation, the adventures of Rāma Candra, although differing altogether in the scale of its different sections and in its details. As a work of art, it has, to European readers, its prolixities and episodes which grate against Occidental tastes, but I never met a person who has read it in the original who was not impressed by it as the work of a great genius.

I do not propose to give any specimens of it, for time would not allow me to do so, and, moreover, any extract would be like presenting a glass of water as a specimen of the ocean.[1] Its style varies with the subject. There is the infinite pathos of the passage describing Rāma's farewell to his mother, the rugged language describing the horrors of the battlefield, and, when occasion requires it, a sententious,

[1] In Appendix II I give a translation of an often quoted specimen of his narrative style.

aphoristic method of dealing with narrative, which teems with similes drawn, not from the traditions of the schools, but from nature herself, and better than Kālidāsa at his best. His characters, too, live and move with all the dignity of a heroic age. They are not colourless phantoms which he clothes with beautiful imagery, but are real beings each with his well-defined personality. Rāma, perhaps too perfect to enlist all our sympathies; his impetuous and loving brother Lakshmaṇa; the tender, constant Bharata; Sītā, the ideal of an Indian wife and mother; Rāvaṇa, destined to failure, and fighting with all his demon force against his fate,—all these are characters as lifelike and distinct as any in Occidental literature. It would be a great mistake to look upon Tulasī Dāsa as merely an ascetic. He was a man that had lived. He had been a householder (a word of much meaning to an Indian), and had known the pleasures of a wedded life, the joy of clasping an infant son to his bosom, and the sorrow of losing that son ere he had attained his prime. He appealed, not to scholars, but to his native countrymen as a whole—the people that he knew. He had mixed with them, begged from them, prayed with them, taught them, experienced their pleasures and their yearnings. He had wandered far and wide, and had contracted intimate friendships with the greatest men of his time—men like Mān Singh, of Amber; Ṭōḍar Mall, Akbar's finance minister; and 'Abdu'r-raḥīm, Khānkhāna. No wonder that such a man, who was at the same time a great poet and an enthusiastic reformer, at once sane and clean,[1] was taken for their own by the multitude who lived under the sway of nature and in daily contact with her secrets, with flowers and trees, with beasts and birds, with hunger and with thirst. "Here," cried they, "is a great soul that knows us. Let us take him for our guide."

His *Gītāvalī* is a work of a different character. Like the epic, it narrates the career of Rāma, but the poetic flavour

[1] In an age of license Tulasī himself claims, and justly claims, credit for the cleanness of his poems. There is not one lewd thought in them from cover to cover.

of tenderness reigns supreme. It may be called the Gospel of the Infant Rāma. The greatest portion of the work is devoted to the childhood of his hero, and is a charming and most poetical account of his and his brothers' baby lives. It is true to nature from first to last. There are no portents, no miracles, just a loving tale of three little Indians, from babyhood to boyhood, which captivates the reader as he scans its pages.

Here is one of his pretty pictures.

> "Full of happiness Kauśalyā caresses her little darling. She lets him cling to her finger as she teaches him to walk in the fair courtyard of the palace. *Runu jhunu, runu jhunu*, sweetly tinkles the bell-girdle on his waist, sweetly tinkle the anklet-bells on his feet, as she helps him along. . . . His bonny face is a picture, with two little teeth peeping out behind his dawn-rosy lips, and stealing away the hearts of all. . . . His bright eyes, henna-darkened, put to shame the glancing silver-fish. . . . As he hears his mother snap her fingers, he crows and springs with delight, and anon he fills her with dismay when he lets her finger go. He tumbles down and pulls himself up upon his knees, and babbles with joy to his brothers when his mother shows him a piece of cake: and she, as she looks at his pretty baby ways, is drowned in love, and cannot bear her happiness. . . . Saith Tulasī Dāsa, the man that loveth not this sweetness, hath no soul, and his life in this world is in vain." [1]

The *Kavittāvalī* (like the *Gītāvalī*, the name of the poem describes the metre in which it is composed) also deals with the life of Rāma, but here we have a work in the heroic style. Eastern descriptions of battles rarely appeal to European taste, but in the Kavittāvalī there is some really fine word-painting, the sound being literally an echo of the sense. The account of the burning of Rāvaṇa's

[1] Gītāvalī, i, 32.

city, Laṅkā, is remarkably vivid in its descriptive power. We hear the crackling of the flames, the shouts of the citizens, and the cries of the helpless women as they call for water. This is one of his verses:—

> "'Fire! Fire! Fire!' They flee, they run hither and thither for their lives. Mother knows not her own daughter. Father helps not his son. Girls, with their hair dishevelled, nay, their very garments torn open, blind in the darkness, children, old men, cry and cry again and again for 'water, water.' The horses neigh, the elephants trumpet as they break forth from their stalls. In the vast mob, men shove and trample, one crushing the other as he falls beneath his feet. Calling each other's names, children shriek, lamenting distraught, crying, 'My father, my father, I am being scorched, I am being burnt alive in the flames.'" [1]

The *Vinaya Pattrikā*, or Petition, is an altogether different work. Here the poet is a suppliant. An interesting legend tells how it came to be written. One day a homicide reached Benares on a pilgrimage of remorse, crying, "For the love of the Lord Rāma, give alms to me, a homicide." Tulasī, hearing the well-beloved Name, called him to his house, gave him sacred food that had been offered to the God, declared him purified, and sang praises to his adored deity. The Brāhmaṇs of Benares held an assembly, and sent for the poet, asking how this homicide's sin was absolved, and why he had eaten with him. Tulasī replied, "Read ye your Scriptures. Their truth hath not entered yet into your hearts. Your intellects are not yet ripe, and they remove not the darkness from your souls." They replied that they knew the power of the Name, as recorded in the Scriptures; "but this man," said they, "is a homicide, what salvation can there be for him?" Tulasī asked them to mention some proof by which he might convince them,

[1] Kavittāvalī, v, 15.

and they at length agreed that if the sacred bull of Śiva would eat from the homicide's hand, they would confess that they were wrong and that Tulasī Dāsa was right. The man was taken to the temple, and the bull at once ate out of his hand. Thus did Tulasī teach that the repentance of even the greatest sinner is accepted by the Lord. This miracle had the effect of converting thousands of men and making them lead holy lives. The result enraged the Kaliyuga (the Hindū equivalent of the Devil of Christianity), who came to the poet and threatened him, saying, "Thou hast become a stumbling-block in my kingdom of wickedness. I will straightway devour thee, unless thou promise to stop this increase of piety." Full of terror, Tulasī confided all this to Hanumat, who appeared to him in a dream. Hanumat consoled him, telling him he was blameless, and advising him to become a complainant in the court of the Lord himself. "Write," said he, "a *Vinaya Pattrikā*, a petition of complaint, and I will get an order passed upon it by the master, and will be empowered to punish the Kaliyuga. Without such an order I cannot do so, for he is the King of the present age." According to this advice Tulasī wrote the *Vinaya Pattrikā*. I shall give a further account of this work and an extract from it later on.

So far I have dealt with Tulasī Dāsa as a poet; it remains to consider him as a religious reformer. Here he undoubtedly took up the doctrines of Rāmānanda, though he developed them in a way peculiarly his own. His great claim to attention is that while other Indian reformers have taught elevated doctrines, he not only taught them but succeeded in getting his teaching accepted by the nationalities which he addressed. We judge of a prophet by his fruits, and I give much less than the usual estimate when I say that fully ninety millions of people base their theories of moral and religious conduct upon his writings. If we take the influence exercised by him at the present time as our test, he is one of the three or four great writers of Asia. No doubt the secret of his success was

his power as a writer in the vernacular. He himself claims the right to use the vernacular as a medium for religious teaching. "When a rough blanket," he says, "is more useful, why wear a silken doublet?"[1] I think also that another reason for his success is the particular vernacular which he adopted. If he had employed the Braj Bhākhā of the West, his words would have been unintelligible in the East, and if he had employed the Bihārī of the East, the West would have failed to understand him. Fortunately for India his native language was the Eastern Hindī of Oudh, a form of speech intermediate between the two languages of the East and West, and intelligible to the speakers of both. Whence it follows that his great work, the Rāmāyaṇa, is for all practical purposes the Bible of the Hindūs who live between Bengal and the Panjab, and between the Himālaya and the Vindhyas.

Tulasī Dāsa founded no sect, no *church*. We never hear of a Tulasī-dāsī, as we hear of a Kabīr-panthī, or of a member of the Ārya or Brahma Samāj. A man might belong to any Hindū sect and yet follow his teaching. He accepted all the ordinary Hindū theology, with its entire mythological machinery. He even recognised the antagonistic *adwaita* Vēdāntism of Śankara Ācārya, and employed some of its ideas for his similes. But, to him, all these were so many accidents beside the great truths on which he laid stress, viz. :—That there is one Supreme Being. That Man is by nature infinitely sinful and unworthy of salvation. That, nevertheless, the Supreme Being, in His infinite mercy, became incarnate in the person of Rāma to relieve the world of sin. That this Rāma has returned to heaven, where we have now a God who is not only infinitely merciful but knows by actual experience how great are man's infirmities and temptations, and who, though himself incapable of sin, is ever ready to extend his help to the sinful human being that calls upon him. On all this follows, not independently but as

[1] Dōhāvalī, 572.

a corollary, the duty which is owed to one's neighbour, and the doctrine of the universal brotherhood of man.

"But," you will say, "this is in its essentials the teaching of Christianity." I can only reply that that is what Tulasī Dāsa taught over and over again, what he was never weary of repeating. Rāma is God, therefore he can save him. Rāma is man, therefore, as he says in one of his most beautiful poems, "although my body is diseased, although man's very words are foul and false, yet, O Lord, with Thee doth Tulasī hold the close kinship of a perfect love." Here is one of his prayers to Rāma in the Vinaya Pattrikā. It might form a portion of a Christian prayer-book.

> "Lord, look thou upon me,—naught can I do of myself. Whither can I go? to whom but thee can I tell my sorrows? . . . Oft have I turned my face from thee, and grasped the things of this world; but thou art the fount of mercy; turn not thou thy face from me. . . . When I looked away from thee, I had no eyes of faith to see thee where thou art; but thou art all-seeing. . . . I am but an offering cast before thee; what prayer can the reflection on the mirror make to him who lives and is reflected in it? First look upon thyself and remember thy mercy and thy might; then cast thine eyes upon me and claim me as thy slave, thy very own. For the name of the Lord is a sure refuge, and he who taketh it is saved. Lord, thy ways ever give joy unto my heart; Tulasī is thine alone, and, O God of mercy, do unto him as seemeth good unto thee." [1]

What relationship do the other deities of Hinduism bear to Rāma in Tulasī Dāsa's theology? The answer is difficult. I think that we may compare them all (even Śiva and Pārvatī) to the position which Angels and Saints occupy in the Roman Catholic Church. Some of them have mighty powers, but all are subordinate to Rāma. The

[1] Part of Vinaya Pattrikā, 148, 149.

Vinaya Pattrikā well illustrates this. It is a collection of hymns, culminating in a series of addresses to his Master. The idea of the construction of the work is that of the presentation of a petition to an earthly king, and hence before approaching the presence supplications have to be made to the doorkeeper and courtiers for leave of access. These are Ganēśa, the Sun-god, Śiva, Pārvatī, the Ganges, Hanumat, and so on. Of special interest is the position taken by Hanumat. He is invariably represented as being, in heaven, Rāma's personal attendant, and in connection with this I may mention one really beautiful legend which, though not recorded by Tulasī Dāsa himself, is still directly traceable to his influence. There was a man, the vilest of scavengers, suffering from a loathsome disease, and lying in a foul and filthy place. In his pain he cried out "Ah Rām, Ah Rām." Hanumat happened to be flying by at the time, and indignant at hearing his Master's name uttered in such disgusting surroundings he kicked the man on the breast. That night when, according to his custom, he was shampooing Rāma's body he found a dreadful wound upon the deity's breast. Horror-stricken, Hanumat asked how it happened. "You kicked a poor man on the breast while he was calling upon my name. And what you did to even the vilest of my children, you did unto me."

The relationship of Christianity to the teaching of Tulasī Dāsa would form an interesting subject of inquiry. That Tulasī Dāsa did any direct borrowing is, I think, improbable. The first Jesuit Mission did not come to Agra till 1580, six years after the poet had commenced the Rāmāyaṇa; but Christianity had long been flourishing in Southern India, and its teaching may well have been 'in the air' in the North. Certain it is that much of his doctrine is coincident with that of Christianity. He taught the universal fatherhood of God, and the consequent universal brotherhood of man; and that God, by becoming incarnate, like Parsifal *durch Mitleid wissend*, can understand man's infirmities and is willing to save him, unworthy as he is.

Whatever may be the source from which he drew his

inspiration, there can be no doubt about its general acceptance. Over the whole of the Gangetic Valley his great work is better known than the Bible is in England. Prince or ploughman, every Hindū of Āryavarta is familiar with it. Even the Paṇḍits who formerly despised it now render it homage. Over and over again have I myself proved by practical experience, as I have sat amongst the village elders of my old district of Gayā, how the quotation of a well-known favourite verse or two wins the way to the hearers' hearts. Their attitude changes at once. The air of deferential stupidity which they conceive to be the orthodox manner to assume before the Collector Sahib vanishes, and, instead, we find sensible men talking with confidence to a superior whom they believe to be sympathetic.

The practical result of this general adoption of Tulasī's religious attitude has been of the greatest importance to Northern India. In the poet's own time the masses of Hindōstān had two alternative religions open to them. One was the crude polytheism of the worship of village godlings, and the other was the Kṛṣṇa-cult. The first still exists, but controlled and thrust into the background by Tulasī's faith. What the Kṛṣṇa-cult becomes among the uncultivated masses, the religious fate of Bengal has shown. It inevitably tends to become a sex-worship, and its textbooks teem with "the most passionate, the most licentious, descriptions of the love adventures of Kṛṣṇa among the herd-maidens." All else is lost, and there gradually develop the unnameable horrors of a Śākta-cult. From this Tulasī Dāsa has saved Upper India, and I believe that the fact in great measure accounts for the marked difference between the two nationalities. The people of Hindōstān acknowledge the rule, not of a relentless fate, but of a God who knows and loves each one of his worshippers. Take a well-known proverb: *Jisi vidhi rākhē Rām, usi vidhi rahanā bhaiyā.* Literally translated this is, "Brother, remain thou in the station in which Rāma hath placed thee." It is usually, and quite properly, taken to mean that a man should remain content in that state of life unto which it hath pleased God

to call him. So it does, but to a Hindū of Upper India it means far more. To him, it is not Fate, it is not Brahmā, Viṣṇu, or Śiva, not any of the numerous godlings who surround his village and his home, who has placed him where he is. It is Rāma, Rāma the loving, Rāma the compassionate, Rāma who was once a man, Rāma who knows him personally and who listens to his appeals. All this is conveyed to him by that one name. And so he really *is* content, and knows that all is for the best.

Finally, I have already given a few specimens of Tulasī Dāsa's poetic style, and I would ask to be allowed to conclude with a translation of the short poem which he wrote on the death of his friend Ṭōḍar Mall, the Emperor Akbar's famous minister. The opening lines are curiously like Sir Henry Wotton's "Lord of himself, though not of lands."

"Lord of but four small villages, yet a mighty monarch whose kingdom was himself; in this age of evil hath the sun of Ṭōḍar set.

"The burden of Rāma's love, great though it was, he bare unto the end; but the burden of this world was too heavy for him, and so he laid it down.

"Tulasī's heart is like a pure fount in the garden of Ṭōḍar's virtues; and when he thinketh of them, it overfloweth, and tears well forth from his eyes.

"Ṭōḍar hath gone to the dwelling-place of his Lord, and therefore doth Tulasī refrain himself; but hard it is for him to live without his pure friend."

APPENDIX I.

On the Influence exercised by Tulasī Dāsa in Western Hindōstān.

A friendly critic, after hearing the lecture, suggested to me that I had unconsciously exaggerated the influence of Tulasī Dās in Western Hindōstān, where, he maintained, the worship of Kṛṣṇa prevails, and not that of Rāma. To this I reply that I designedly estimated the number of followers of Tulasī Dāsa at ninety millions (instead of the hundred millions popularly attributed to him) so as to allow for professed Kṛṣṇa worship. But no one who has not studied the poet's Rāmāyaṇa can have any idea of how it has entered into the soul of every Hindū, even of Western Hindōstān. When one reads it, one has the feeling which overpowers the reader of "Hamlet." It seems to be "full of quotations." The entire language of the people is imbued with his picturesque phrases. Even Urdū employs expressions invented by him. For instance, take the familiar Urdū phrase *kōrā kāghaz*, for 'blank paper.' This is borrowed from the reference of Tulasī Dās to the 'virgin' (*kōrā*) paper on which he wrote the Gestes of Rāma. The simile was not, so far as my researches show, employed by any writer before his time, and the words are now a commonplace of conversation, the original meaning of *kōrā* being altogether forgotten.

But my critic forgot that the worshippers of Kṛṣṇa themselves admit the supremacy of our poet, although they do not directly worship his deity. Nābhā Dās, the author of the *Bhakt Mālā*, and a leader of the Kṛṣṇa sect, wrote: "For the redemption of man, in this perverse Kali-yuga, Vālmīki has been born again as Tulasī. . . . . A single letter of his Rāmāyaṇa has redeeming power, and would work the

salvation of one who had even committed the murder of a Brāhmaṇ." They get over the difficulty of this pre-eminence by explaining that Kṛṣṇa is only another form of Rāma; and Priya Dās, the commentator on the *Bhakt Mālā*, relates how an image of Kṛṣṇa at Bṛindāban, actually changed itself into an image of Rāma in order that Tulasī Dās might worship it.

So much for proofs from literature. As to the state of affairs at the present day, I cannot do better than quote the following letter on the subject from a missionary, Mr. Dann, who is acknowledged to be a master of both Eastern and Western Hindī. *Kabīr*, to whom he refers, was a predecessor of Tulasī Dās, who owed much to him.

"Thank you for the copy of your paper on Tulsī Dās. I, too, can speak well of Tulsī Dās, who has left us a *clean* religious book, and one, too, with a strong theistic tone. It *is* a good thing that the Rāmāyaṇ is so popular. I have worked in Allahabad and District, in Delhi and the Gurgaon District, and, as you know, am hoping to return this Autumn to Bankipur. Nineteen years' rather close intimacy with all sorts and conditions of Hindūs (as well as Muḥammadans) enables me to endorse a good deal of what you say about the widely diffused influence of Tulsī Dās. Even in Delhi itself his Rāmāyaṇ has a large sale, and a quotation from him will make the faces of Hindū hearers light up. In the Gurgaon District, while Jāṭs, etc., might be irresponsive, Brāhmaṇ (I mean, of course, village Brāhmaṇ) and Baniyā owned the magic spell. I once inquired of my mistrī—Brāhmaṇ by caste and mason by trade—in Palwal, and he told me that my knowledge of Tulsī Dās, slender, alas! though it is, was one reason why the hearts of men like himself warmed to me. The influence of *Kabīr* is, I think, fully as important; in fact, *Kabīr* touches races and castes who have little in common with Krishnaism and who know little of **राम दशरथ-का बेटा**, but much of **राम जग-का करता**, as they phrase it (and *pronounce* it too). Kabīr is, if I mistake not, the great Guru of Kōlīs and Chamārs as well of many higher in the scale. I know men who get on without knowing Tulsī Dās and Kabīr, and never dream of learning from these great masters. They content themselves with Urdū and a *little* literary Hindī. But I happen to know that these men never get so *close* to the same classes of people as others do who have this great advantage

of knowing the authors who have their shrine in the hearts of the non-Urdū-speaking and non-official classes. I fully adhere to what I tried to express in the preface to my little book on Hindī Composition, that just as it is a breach of etiquette to use Sanskrit words in speaking to a Musalmān gentleman, so it is quite as repulsive to a Hindū to listen to religious conversation in which more than half the words used are Persian and Arabic.

"You can govern Indians through the medium of Urdū or pedantic Hindī. If you want to win the Mohammadan you need to speak good Urdū, throwing in a quotation or two from Sa'dī or Ḥāfiẓ. But for the real Hindū you must take the opposite line. His vernacular poets are the key to his affections, and there do occasionally come days when the man who has won hearts can meet a crisis, in which the mere conscientious but unsympathetic official will be powerless."

APPENDIX II.

I here give a translation of the well-known passage of the Rāmāyaṇa (*Kishkindhya-kāṇḍa*, 14 ff.) in which Tulasī Dāsa describes the passing away of the rainy season. It is a specimen of only one of the poet's many styles, and here reminds one of Kālidāsa in the first canto of the Raghuvaṁśa. There is an antithetic balancing of sentences which recalls the book of Proverbs. For instance, Tulasī Dāsa's "As the sheet lightning flickereth, so is the short-lived love of the wicked," is built on the same principle as proverbs like "As a thorn goeth up into the hand of a drunkard, so is a parable in the mouth of fools." The translation has appeared in India, but is not likely to have been seen in this country. The speaker is Rāma, who is waiting for the rains to cease in order that he may continue his search for Sītā.

"The sky, covered with arrogant rain-clouds, fiercely roareth, while my heart is distraught, bereft of its darling. The sheet lightning flickereth amidst the heavy clouds, fitful

as the short-lived love of the wicked. The heavy vapours pour forth rain, and hang close to the earth, like a wise man stooping 'neath his weight of wisdom. The mountains bear the never-ceasing assaults of the raindrops, standing proudly unconcerned; and even so the holy man heedeth not the words of the wicked. Each shallow streamlet, flooded to the brim, hasteneth eagerly on its way, like a vain fellow puffed up with a little wealth. The clear water which falleth on the earth is become mud (and hideth it from the sky), as the cares of this world envelop the soul (and hide it from its Creator). With here a drop and there a rill, the water filleth the lakes, like virtue entering a good man's heart; while the rushing rivers flow into the Ocean and find rest, even as the soul findeth rest in faith in God.

"The grass groweth green and thick upon the ground, hiding the very paths so that they cannot be traced out; and even so the disputations of the unbelievers ever hide the true path of the scriptures.

"The frogs shout lustily around us, like a school of Brāhman postulants reading holy books.[1] Fresh shoots appear on bushes, as wisdom springeth in the hearts of the pious; and only the *arka* and *jawās* trees lose their green leaves from the rainfall, as the schemes of the wicked fail under a righteous governor. Seek where thou wilt, thou wilt find no dust; so when a man yieldeth to passion his piety departeth. Fair shineth the earth prosperous with its fields of corn, fair as a charitable man blessed by prosperity; but in the dark nights the countless fireflies are radiant, like unto hypocrites that have met their meet companion (the night of ignorance). The field banks (left uncared for) are burst and washed away by the heavy rainstorms, as a woman is ruined by being left to her own devices; but the wise and clever husbandman weedeth his

[1] Compare Ṛg-vēda, vii, 103. The celebrated hymn has had many interpreters, but this line of Tulasī Dāsa shows that it is to be interpreted literally. I can certify from personal experience that, as a matter of fact, the noise of the muttering of a number of young Brāhmaṇs learning Sanskrit exactly resembles the noise of a school of frogs. On one occasion I actually mistook one for the other.

crops, as the wise man weedeth his heart of delusion, passion, and pride. The Brāhmaṇī goose hath hidden itself, even as piety disappeareth in this age of sin; and as on the barren land, for all the rain, not a blade of grass is seen, so lust is born not in the heart of a servant of the Lord. The earth is brilliant with swarms of manifold living creatures; so, under a good governor, do his subjects multiply. Here and there a wearied traveller sitteth to rest himself, as a man's senses rest when wisdom is born in him.

"At times a mighty wind ariseth and hither and thither scattereth the clouds, as, with the birth of a disobedient son, a household's piety is destroyed. At one time, by day, there is a thick darkness, at another time the sun is visible; even so, true knowledge is destroyed or born, as a man consorteth with the vile or with the holy.

"The rains are past, the Autumn-time is come; O Lakṣmaṇa, see how fair the world appeareth. (The first sign that it cometh) is the white-bearded blossom of the tall thatch-grass, which hideth the earth as though declaring that the old age of the rains had come. Canopus shineth in the heavens, and the water which drowned the pathways is drying up, as desire drieth up when the True Content is achieved. The water glisteneth clear in the streams and lakes, like a holy man's heart from which passion and delusion have departed. Gently minisheth the depth of the streams and lakes, as the wise man gradually loseth his thoughts of self. The wagtail knoweth that the Autumn is arrived, and cometh forth from its hiding-place, beautiful as a good work done in season. No mud is there, and yet no dust, fair shineth the world, yea, like unto the deeds of a lore-learned king: yet as the waters fall the fish are troubled, as a foolish spendthrift is perplexed when his possessions are wasted. The sky, serene and pure, without a cloud, is like unto a servant of the Lord, who is free from all earthly desire; while now and then there fall a few drops of Autumn rain—few as the few who place their faith in me.[1]

[1] Rāma was, of course, an incarnation of the Lord.

"Joyfully issue forth from the cities, kings and eremites, merchants and beggars, even as the four orders of mankind desert all care when they find faith in the Lord.

"Happy are the fish where the water is deep; and happy is he who findeth naught between him and the fathomless mercy of the Lord. The lotuses bloom, and the lakes take from them a charm, as the pure Spirit becometh lovely when it taketh material form.[1] The noisy bees hum busily, and birds of many kinds sing tuneful notes. The Brāhmaṇī goose alone is mournful when it seeth the night approach (which separateth it from its mate), as the evil man mourneth when he seeth the prosperity of another. The *cātaka* waileth in its ever waxing thirst, even as an enemy of the deity never findeth peace. The moon by night consoleth for the heat of the Autumn sun, as sin vanisheth at the sight of a holy man. The partridge-coveys gaze intent upon the moon, like pious men whose only thought is for the Lord. The gnat and the gadfly disappear in fear of Winter, as surely as a house is destroyed which persecuteth Brāhmaṇs.

"The swarms of living creatures with which, in the rainy season, the earth was fulfilled, are gone. When they found the Autumn approaching, they departed. So, when a man findeth a holy spiritual guide, all doubts and errors vanish."

[1] Here Tulasī Dāsa certainly speaks of a Nirguṇaṁ, and not of a Saguṇaṁ, Brāhman.

ART. XVII.—*On the Origin and Import of the names Muslim and Ḥanīf.* By D. S. MARGOLIOUTH.

ALTHOUGH the religion founded by Mohammed is called by strangers after his name, its followers designate it differently. There is indeed a name which rarely occurs, *ḥammādūna*, which is applied to them, and which indirectly, at least, is connected with the name of the Prophet. That word signifies "Those who utter the formula 'Praise be to God,'"[1] and this formula (*al-ḥamdu lillāhi*) has some connection with the Prophet's name, which was interpreted by his contemporaries as 'the greatly to be praised.' The court-poet Ḥassān regards the name Mohammed as derived by God from His own name, 'the praised,' in order to do the Prophet honour (ed. Tunis, p. 23)—

شق له من اسمه كى يجله فذو العرش محمود وهذا محمد

"So He that is on the throne is *maḥmūd*, and this is *Mohammed*."

But we might conversely regard the formula "Praise be to God" as suggested to the Prophet by his own name, and equivalent in his lips to the Biblical "Not unto us, O Lord, but unto Thy name give glory."

Sprenger, whose excellent work contains a variety of conjectures, suggested that Mohammed was not the Prophet's name originally, but one taken by him when he started his mission. This conjecture has found little favour,[2] and, indeed, should have been recalled by its author. For, first, the name Mohammed (*Μοαμέδης*) was shown to occur on an

[1] Used by Imru'ul-Ḳais, xv, l. 1; but the line can scarcely be genuine.
[2] Hirschfeld (*Beiträge*, p. 72) accepts it.

inscription[1] five centuries earlier than the Prophet's time. Further, the Arab archæologists made lists of persons who bore the name Mohammed before the Prophet: Ibn Duraid[2] mentions four such persons, one of whom was remotely connected with the Prophet (if the genealogy be trustworthy). Their interest would, however, have been to show (had it been possible) that no one was ever called Mohammed before the greatest wearer of the name: thus there is a tradition which assures us positively that no one was ever called Ḥasan before the Prophet's grandson;[3] and though it is granted that there were Aḥmads before the Prophet, attention is called[4] to the fact that the name was rare at the commencement of Islam. Further, we find the Prophet's name handled by his contemporaries with a freedom which would only be possible with a familiar appellation. He calls himself both Mohammed and Aḥmad; in contemporary verse he is also called Maḥmūd.[5] These variations were not uncommon with familiar proper names: thus in the same poem a man is called both Ma'bad and 'Abdallah,[6] and Farazdaḳ[7] calls the Caliph Omar *'Amr*; and a man named 'Uthman might be called 'Athm.[8] But it is unlikely that such license would have been taken with a name chosen for its special import. And, indeed, after the Prophet's time these three names came to be regarded as distinct.

Besides this, the source whence Sprenger drew his conjecture is quite untrustworthy. To Mohammed's contemporaries the name meant 'the greatly to be praised.' "Why have you named your grandson Mohammed," asked the Koraish of 'Abd al-Muṭṭalib (according to Ibn Duraid),[9] "when none of your ancestors had that name?" "Because," answered the grandfather, "I desire him to be praised in

[1] Sprenger, 2nd ed., i, 581.
[2] *Ishtiḳāḳ*, p. 6.
[3] Diyarbekri, i, 470.
[4] Mubarrad, *Kāmil* (Cairo, 1309), i, 241.
[5] Ibn Isḥāḳ, p. 553, l. 4; p. 659, l. 13; p. 1023, l. 13.
[6] *Ḥamāsah*, p. 378; *Christian Arabic Poets*, p. 758.
[7] Ed. Boucher, p. 37.
[8] Abu Zaid's *Nawādir*, p. 50; see also Ḳudāmah's *Naḳd*, p. 87.
[9] L.c.

heaven and on earth." Etymologically it very likely meant 'the greatly desired,' since 'to desire' is the sense of the root in Hebrew, which may here be preserving an old sense; and to this there might seem to be an allusion in a verse of the court-poet 'Abbās son of Mirdās (Ibn Isḥāḳ, 859)—

ان الاله بنى عليك محبة فى خلقه ومحمّدا سماكا

"God established love for thee in His creation and called thee Mohammed."

But the biographer Ibn Isḥāḳ quotes a story[1] to the effect that the word for Comforter in St. John's Gospel, which he cites according to the Palestinian version, means the same as Mohammed. It is certain that the meaning is not the same; hence the name Mohammed would never have been adopted by the Prophet in order to fulfil the announcement of the coming of the Comforter. Nor, indeed, can we without improbable conjectures find any justification for Ibn Isḥāḳ's statement: it was probably the invention of a Christian renegade, and is on a par for accuracy with numerous other statements made by Muslim authors as to the meaning of words occurring in the books of other communities. Moreover, according to the Koran[2] it is the form Aḥmad[3] which is to be found in the Gospel.

The distinctive names adopted by Mohammed for his community were *Muslim* and *Ḥanīf*. The former is, of course, much the more common, but authors of early date often allude to the latter. Thus Jarīr, in a verse preserved by Mubarrad, speaks of Farazdaḳ as having become a Ḥanīf against his will (*Kāmil*, ii, 104)—

ان الفرزدق اذ تحنف كارها

and in one printed in his Divan talks of the opposition of

[1] p. 150.

[2] lxi, 6. Fakhr al-dīn al-Rāzī (vol. vi, p. 286) shirks the question of the connection of this word with *Paraclete*, but shows remarkable acquaintance with the Gospel.

[3] This word occurs with the sense 'most praiseworthy' in Al-Akhṭal, p. 189: *Kāmil*, i, 19.

the Christians to the religion of those who become Ḥanīfs (ii, 11)—

خلاف النصارى دين من يتحنف

Of both names it may be said with practical certainty that they existed with religious value before Mohammed's time.

In the case of the word Muslim, this is asserted categorically in the Koran. Abraham himself is said to have styled "you" the Muslims (Surah xxii, 77). And on this subject the Koran is very fairly consistent. In the third Surah it is justly argued that Abraham can have been neither a Jew nor a Christian, since the Law was revealed after his time; he was, it asserts, a Muslim, a Ḥanīf. In what appears to be an early Surah containing an error about Sarah which is afterwards corrected (li, 29), it is asserted that the house of Lot was the only Muslim house at Sodom (36). In the second Surah Abraham urges his descendants to become Muslims before they die. In the twelfth Surah Joseph prays that he may be found on his deathbed to be a Muslim. According to a Tradition quoted by Ya'kūbī (i, 259) the Prophet forbade the abuse of the eponymous heroes Muḍar and Rabī'ah on the ground that they were *Muslims*, for which, indeed, another form of the Tradition substituted the phrase "followers of the religion of Abraham." If Mohammed in one place is commanded to be the *first* of the Moslems, the commentators seem justified in interpreting this as the first Muslim among the Koraish, or the first in rank. Although the use of the word naturally grew more frequent as the community became more numerous and important, it cannot be confined to any period of the Prophet's activity.

That it was not at first invented by Mohammed may be inferred from the fact that it is a word of ambiguous meaning, with, indeed, unpleasant associations. The most obvious sense of *Islam* at Meccah was 'treachery,' the abandonment of one's friends to their fate, the refusal of help to those who had a right to demand it.

This sense appears clearly in numerous passages:—

Ibn Isḥāḳ (ed. Wüstenfeld), p. 556. The poet Abu ʿAzzah, urging the Kinānah to aid the Koraish, says—

لا تُسْلمونى لا يحِلُّ إسْلام

"Do not betray me: *Islam* (treachery) is not lawful."

Doubtless there is a reference here to the other sense of Islam. In this case *Islam* is used without an object; ordinarily the object is expressed, and with this construction the verb is very common.

Ibn Isḥāḳ, 474, اوردهم ثم اسلمهم (of Satan), "He brought them to the fray, and then abandoned them."

Ibn Isḥāḳ, 559, "If we knew that you were going to fight," لما اسلمناكم, "we should not desert you."

Wāḳidi, ed. Kremer, 278—

اما رسول الله فاصحابه لن يسلموه

"As for the Prophet of God, his companions will never betray him."

Ibn Isḥāḳ, 745—

رايت قوماً لا يسلمونه لشىء ابدًا

"I have seen persons who will never abandon the Prophet for any consideration."

Ibn Isḥāḳ, 752—

اسلمتنى بيد القوم

"You have abandoned me to the people."

Other examples occur in the same author: 167, l. 5; 168, ll. 9, 14, 18; 172, l. 3 a f.; 217, 229, 231.

Mubarrad, *Kāmil* (Cairo), ii, 19 (verse of Al-Aʿsha)—

لن يسلموها لازهادها

"They will not abandon her because of her poverty."

Mubarrad, *Kāmil*, ii, 64 (verse of an Asadite)—

وملوك خندف اسلمونى للعدى

"The kings of Khindif have betrayed me to the enemy."

Alif-Bā, i, 380 (after Abu 'Ubaidah), of a man's friends, when robbers approached, اسلماه وهربا عنه, "they abandoned him and fled from him."

The note on *Ḥamāsah*, p. 115, takes account of this sense: "You say *aslamtuhu* when you leave a man alone with one who desires to do him mischief." It is, indeed, a synonym of خذل, with which it is often used: Jāḥiẓ, *Bayān*, ii, 62—

لم يكن عندى حيلة الا خذلانه واسلامه الى الحية

"I had no plan save to betray and abandon him to the snake."

I am inclined to think the most frequent use of this verb is at all times in the sense 'abandon' or 'betray.'

Ḥamāsah, 576—

اخو سقطة قد اسلمته العوائد

"A sick man whom his habits have given up."

Bayān, ii, 67—

واسلمها الباكون الا حمامة

"All the weepers abandoned her, save a dove."

Bayān, ii, 74 (Jarīr)—

اسلمها ما قال طاغيها

"They were betrayed by what their rebel (Musaylimah) said."

Ibn al-Athīr says rightly in his dictionary that the word properly refers to any form of delivery, but the sense of handing over to destruction has become normal—

دخل التخصيص وغلب عليه الالقاء فى الهلكة

From the Divan of Sibṭ Ibn at-Ta'awidhi, sixth century, it would be possible to collect about a dozen examples of this usage. A child who dies early is said to *aslam* his parents, etc. Probably the old legal use was of a *jar* (client) being handed over by his patron to the vengeance of the persons with whom he had contracted a blood-feud.[1]

[1] This subject is well treated by O. Prokesch, *Über die Blutrache bei den vorislamischen Arabern*, Leipzig, 1899. Cf. Imru'ul-Ḳais, lvi, 3; *Aghāni*, x, 27.

Probably, if more of the verses of the opponents of Islam survived, we should find more allusions to the sense 'traitor.' The verse of Abu ʿAzzah quoted above is the clearest that I can discover. It is, however, possible that a word *Māsōr*, which should be the equivalent of Muslim in this sense, and which occurs occasionally in the B. Talmud, may be a translation of it. A tradition given in B. *Gittin*, 45*b*, speaks of "a scroll of the Law written by a heretic, a *masor* (traitor), a stranger, an idolator." In the alternative form (*Menaḥoth*, 44*a*) the 'traitor' is omitted. Since it is probable that this tradition refers to religious varieties, it seems likely that *māsōr* stands for Muslim.

Hence it would appear that the name *the Muslims* would most naturally have meant 'the Traitors'; just as the corresponding word in Syriac, *mashl'mānā*, means 'traitor,' and is especially applied to the arch-traitor, Judas Iscariot. Such a name could not have been given voluntarily by a man to a community which he had formed, but he might conceivably take it over from some other community, and endeavour to assign it a less compromising signification. And, indeed, a variety of interpretations appear to have been given the word from early times.

1. In a Tradition given by Aḥmad Ibn Ḥanbal (v, 5) Islam is defined as "letting thy heart be God's *entirely*, and *directing* thy face to God,"

ان يسلم قلبک لله وان توجه وجهک الى الله

Another variety of the Tradition makes it consist in uttering the formula, "I have given over my face to God, and am His entirely,"

اسلمت وجهى لله وتخليت

This is really a double interpretation, based on the expression "I have handed over my face to God," repeatedly found in the Koran, iii, 18; iv, 124, etc.; but this expression is a strange one, and we can reconstruct its genesis with some probability. It would appear to be an intentional alteration of the phrase put into the mouth of Abraham (vi, 79), who,

having found the constellations fail to satisfy the conditions of divinity, said "I *turn* my face to God," where the word used for 'turn'[1] is normal and natural. In a similar context the word 'direct'[2] is also used (x, 105; xxx, 29), "direct your face to the straight religion," which is also normal; another word[3] is used by Shanfara (ed. Const., p. 65) and Jarīr (i, 41) with the same sense. The substitution of the word *abandon* or *resign* for *direct* in connection with the face seems due to the desire to give the word *abandon* in the name Muslim some meaning suitable to the new religion. The phrase "abandon the face to God" certainly occurs already in a verse ascribed by Ibn Kuṭaibah (History, Cairo, p. 20) to Mohammed's precursor Zaid, who declared that "he resigned his face to Him to whom the clouds resign theirs"; but it is safest to regard the verses of these 'precursors' as fabrications based on the Koran. The correct inference from the phrase seems to be that the word Muslim was already known, and that it was unknown what exactly a Muslim resigned; and the phrase already put into Abraham's mouth suggested that what he resigned was his face.[4]

2. In Bokhari (Cairo, 1308, iv, 78) a Muslim is defined as "one who leaves other Muslims in safety (*salima minhu*), and does not molest them with his tongue." This definition is the subject of frequent allusion on the part of preachers, e.g. *Bayān*, ii, 89, line 10. It can scarcely be regarded as meant seriously. Tirmidhi (Lucknow, 1299) confines it to the *best* of the Muslims.

3. The theory of which Carlyle made so much, that Islam means *resignation to the will of God*, is not quite without confirmation from the Koran, but it cannot be said to be very familiar to Mohammedan writers. In this particular phrase the *second* conjugation seems to be regularly employed.

[1] وجهت.

[2] اقام.

[3] نصب.

[4] Mohammed's contemporary, Ḥakīm son of Umayyah, says "face and tongue" (Ibn Isḥāḳ, p. 182).

So *Kāmil*, i, 252—

الصبر والتسليم لله

Bayān, ii, 43—

رضينا بقضاء الله وسلمنا لامره

Mikhlāt, 35—

الرضا بقضاء الله والتسليم لقدرته

This sense is also the most natural in Surah xxxvii, 103, where Abraham and his son "resign themselves"; it is, however, read and interpreted differently. The commentators there interpret it by the tenth conjugation.

The sense 'submit oneself,' 'acknowledge authority,' seems quite clearly to be found in many passages. So Surah xxvii, 31, in Solomon's letter to the people of Sheba, they are told not to be haughty with him, but to come to him as *muslims*, which from the context appears to mean *humbly* (so Baiḍāwī, with the alternative 'as believers'). In verse 38 some one is asked to bring Solomon the Queen's throne before they come to him as *muslims*, with apparently the same sense. In verse 46 the Queen explains that her *Islām* is to the Lord of the Worlds; and in verse 42 the word *muslims* is again employed, but the clause is unintelligible: whether the words be put in the mouth of Allah, or of Solomon, or of the Queen, they are unsatisfactory. Hence, even in this story the technical sense of *aslama* is not quite absent, but we should probably be safe in asserting that in the first of the verses quoted it means 'submitting.' Similarly Al-Khansā (ed. 1895, p. 126) uses it for 'to be humiliated.'

In this sense there is probably an ellipse of some word, which is likely to have been 'oneself,'[1] and, indeed, the corresponding Syriac verb is used thus in a religious context (*Apocryphal Acts*, ed. Wright, p. 182, l. 7).[2] On the other hand, it may be a denominative verb, embodying

[1] Compare the prayer in Bokhari, iv, 62, اسلمت نفسى اليك, where, however, it means "I commit my soul."

[2] ܐܫܠܡܘ ܠܗ ܢܦܫܗܘܢ.

the idiom 'to throw the *salam*,' which occurs in the same sense in Surah xvi, 30. What the *salam* was is not known; clearly it must have been something capable of being thrown. It was something, moreover, the throwing of which had the same signification as the holding out of the white flag in modern warfare.

4. Zamakhshari and other commentators interpret the phrase as 'giving something to God in its entirety,' which would agree well with the sense of the first form, and would be similar to late Hebrew usage. It would also agree well with the leading dogma of Islam, which gives God the universe in its entirety, whereas others are supposed to make Him a shareholder in it. The Koran does not appear to suggest this interpretation, and indeed regularly uses another phrase (*mukhliṣīna lahu'l-dīna*) in its place. But, as we have seen above, this interpretation is known to the Tradition.

5. In one passage (xvi, 83) the word appears to mean 'being grateful,' suggesting that *Islām* signifies to pay God His due, whereas Unbelief (*kufr*) might be regarded as withholding payment.

Finally, it may be noted that both Jews (Surah xxviii, 53) and Christians (Ibn Isḥāḳ, pp. 209, 210) are represented as declaring that they had *aslam*'d before the Prophet. This the Prophet in the case of the Christians refutes by taunting them with their belief in a plurality of deities, their drinking wine, and eating pork. Evidently in this story the Christians and the Prophet are supposed to mean different things by the word. To the Christians it probably implies monotheism only, whereas the Prophet associates it with a whole set of doctrines and practices.[1]

It seems to result from this examination that the word was known to the Prophet (and some other persons) in the sense 'monotheist,' but that he did not know how it came to have that meaning. While adopting it then as a name for his community, he interpreted it differently at different times. So it would be possible to adopt the name Chauvinists

[1] In a verse of 'Abbās Ibn Mirdās (Ibn Isḥāḳ, p. 843) the Ghassan (who were then Christians?) are described as "the Muslims, servants of God."

to designate a patriotic community; but one who was not acquainted with the origin of the name would probably try a variety of hypotheses to bring it into connection with patriotism.[1]

The word *Ḥanīf* is harder. In the Koran it is usually used of Abraham, and ordinarily also with some clause following, as though the word were a difficult one, of which the sense might be obscure to the hearer. The opinions collected by the Arabic grammarians show that there was no traditional meaning assigned to the word by ordinary usage, and that its sense had to be divined by them with the aid of the means that are open to us. These are three. Either the word may be interpreted from kindred Arabic words, which explain the sense of the stem to which it belongs. Or it may be regarded as foreign, in which case we go to some other language to discover its meaning. Or, leaving etymology alone, we may collect the passages in which it occurs and endeavour to deduce its meaning from them.

The first method is on the whole the most in favour with the Muslims. Arabic words of the same root mean 'contorted,' of the feet, when the big toes turn towards each other. This is said to be the sense of the name Al-Aḥnaf, and its diminutive Ḥunaif. 'Contorted' or 'distorted' is not a promising word from which to derive 'orthodox.' But philology easily finds expedients, and two such are obvious. One is to alter the standard. If the standard be straight, then what is distorted is doubtless unorthodox; but if the standard be crooked, then what is distorted from it may perhaps be straight. Hence a Ḥanīf is usually said to be one who *diverges* from *false* religions.

The other expedient is to adopt the principle that things may euphemistically be called by their contraries. According to this the word Ḥanīf properly means 'straight,' and is *euphemistically* applied to feet that are distorted.

These suggestions are clearly too fanciful to deserve serious

[1] The discussion of the meaning of the word Muslim in Hirschfeld's *New Researches* is not affected by the present discussion, since his purpose is to find out its *theological* value.

consideration. Nor does the suggestion of Mr. Koelle (*Mohammed*, p. 25) that the word meant 'Dissenter' seem to accord with the facts.[1]

The verb حنف, which is not common, seems to mean 'to bend' or 'lean.' So A'shā of Ḳais in *Christian Arabic Poets*, 385—

كفوا اذ اتى الهامرز تحنف فوقه كظل العقاب اذ هوت وتدلت

"They fought well, when Hamarz came, with something, like the shadow of an eagle when it swoops, bending over him."

This would seem to refer to some sort of royal umbrella.

Ibn Duraid, *Ishtiḳāḳ*, 20, quotes a saying of Omar—

احنفوا واخشوشنوا وتمعددوا واقطعوا الركب

in which the Arabs are advised to lead a rough life. Since the verb حنف gives no appropriate sense here, it is to be corrected from *Bayān*, ii, 54, where the same tradition occurs, to احفوا 'go barefoot.'

Of foreign etymologies there are two that are promising. The *Lisan al-'Arab* records an etymology which made the word mean 'heathen'; which is, indeed, the ordinary sense of the Syriac *Ḥanpā*, occurring in the Peshiṭta, where the Greek has 'Gentiles' or 'Greeks.' This etymology is adopted by Grimme in his life of Mohammed,[2] who suggests that the Koranic phrase

حنيفا وما كان من المشركين

should be rendered "a ḥanif, *yet not* a polytheist." This theory has much in its favour. The word is usually applied to *Abraham* in the Koran; and by calling Abraham a *heathen* the author would be alluding to a favourite topic of Christian apologetics, first suggested, it would seem, by St. Paul. In Rom. iv, 10–12, it is argued that Abraham's

[1] Cf. Muir-Tisdall, *The Sources of Islam*, p. 96.

[2] *i*, 13. It is worth observing that an Arab pagan is called a 'Greek' by Evagrius; T. Wright, *Christianity in Arabia*, p. 144.

faith was accounted unto him for righteousness before he had received the mark of Judaism, so that he might be the father of all non-Jewish believers; and with this (verse 18) the prophecy that he should be the father of many nations (the word sometimes rendered in Syriac by *ḥanpē*) is connected. This argument would have by no means been valueless to Mohammed, though he cannot have been accurately acquainted with it; but the Christian insistence on the fact that Abraham was a *Gentile* would give a good reason for the name ḥanīf being applied to him by Mohammed.

This theory, however, seems to be seriously opposed by the occasional employment of the word in the Koran *without* the addition "and not one of the polytheists." And where men are told to be "Ḥanīfs unto God" (xxii, 3), what sense would the word have if it meant 'heathen'?

A more attractive suggestion is that of Sprenger, which would want a very little external evidence to turn it into history. This is that the word Ḥanīf is the Hebrew *Ḥānēf* (hypocrite or evil-liver), and was at first applied by the Jews to some heretical sect, probably professedly followers of Abraham, to whom strangers afterwards applied the term without evil intent. Mr. Cunninghame Graham[1] similarly tells us that in Morocco the name 'Epicurus' is familiarly used for Christian missionary, having been at first applied by the Jews to the missionaries who came to work amongst themselves. This very word 'Epicurus' is used in the *Yalkut* Shim'oni[2] to gloss the word *Ḥānēf*; and a tradition embodied in the *Midrash* Rabbah states that wherever the word Ḥānēf occurs in the Old Testament it refers to religious dissent (*mīnūth*).[3] Hence this word is exceedingly likely to have been applied reproachfully by the Jews,[4] who may have been misunderstood by the Arabs of Arabia, just as are their brethren by the Arabs of Morocco. Sprenger also, with justice, calls attention to the verse (Surah iii, 61)

[1] *Maghreb el-Aeksa.*
[2] Isaiah, § 304.
[3] Genesis, § 48.
[4] Who themselves are designated 'the Hypocrites' in the Teaching of the Twelve Apostles; *Supernatural Religion*, 1902, p. 151.

where the followers of Abraham are clearly distinguished from "this Prophet and those who believe"; for this text most naturally would imply the existence of a community of Abrahamists. He further calls attention to the citations from the Rolls of Abraham in early Surahs (liii, 37; lxxxvii, 18), which might conceivably be the Sacred Books of such a sect,[1] though it is equally likely that they are an unscientific name for the Old Testament. What follows in Sprenger has since been exploded; but the conjecture up to this point seems to account for many facts exceedingly well.

Thirdly, attempts have at many periods been made to guess the meaning of the word from its usage without reference to etymology.

1. The word Ḥanīf is interpreted 'straight,' because the phrase *ḳayyim* appears to be used in the Koran as its equivalent. This theory is clearly the source of the line ascribed to Ka'b son of Mālik in Ibn Isḥāḳ, 871—

يقوم الدين معتدلا حنيفا

"Religion stands even, erect."

A line is quoted in the *Lisan* where it is used of a *straight* road; but it is on the authority of Abu Zaid, a notorious fabricator of verses.

2. In Surah xxx, 29, the Prophet is told to "direct his face to the religion, a Ḥanīf, the creation of God, wherein He created mankind." From this passage it was inferred that a Ḥanīf was *a man as nature made him*; and, indeed, a tradition is quoted in the *Lisan* to the effect that men are by nature Ḥanīfs, and only made Jews or Christians by their parents. There are two passages that illustrate this use. *Kāmil*, i, 253, the poet 'Amr Ibn Za'bal says—

انى احاجيک ما حنيف على الفطرة باع الرباح بالغبن

"Verily I will ask thee: What is a Ḥanīf, as nature made him, who exchanges gain for loss?"

[1] Ibn 'Arabi, *Musāmarāt*, i, 55, says this book was revealed 700 years before the Law. Gastfreund (*Mohammed nach Talmud*, etc., ii, 16) follows Sprenger.

In Diyarbekri, ii, 177, some verses are quoted by Ibn 'Umair al-Yashkuri, not later than the year 12 A.H., so popular that women, children, and slaves were in the habit of reciting them. The poet says—

ان تكن ميتتى على فطرة الله حنيفا فانني لا ابالى

"Provided I die a Ḥanīf, as God made me, I reck not."

And, indeed, in Bokhari, iv, 60, *Al-Fiṭrah* (the creation) is defined as including five observances. Cf. iv, 88.

3. Professor Wellhausen, in his *Reste Arabischen Heidenthums* (2nd ed., p. 239), inferred the sense 'ascetic' from three passages. Grimme finds in all three the sense 'heathen.' One is unwilling to differ from either of these authorities: since it is impossible to agree with both, the passages must be considered. They are the following:—

(*a*) Abu Dhu'aib, cited in the *Lisan*—

اقامت به كمقام الحنيف شهرى جمادى وشهرى صفر

"She abode there, as the Ḥanīf abides, during the two months Jumādā and the two months Ṣafar."

According to *Aghāni*, vi, 58, this poet died in the year 26 at the age of 26; hence he may well have meant *Mohammedan* by this word. Without the context it is impossible to be sure of the sense. The 'abiding' will have reference to the *Ḳiyām* of Ramaḍan.

(*b*) Hudh., xviii, 11 (of a cloud)—

كان تواليه بالملا نصارى يساقون لاقَوْا حَنِيفًا

One of the commentators states that a *Ḥanīf* means here a *Muslim*. The extremities of the cloud on the ground are compared to "Christians who, while toasting each other, meet a Ḥanīf." The best sense is elicited if we suppose the Ḥanīf to be one who is a total abstainer; probably then all the Christians endeavour to ply him with wine, whereas there is no such concentration of force on their part with regard to each other. There is no reason for supposing that the prohibition of wine was connected with the term Ḥanīf

before Mohammed's Medinah period. Hence the rendering 'Mohammedan' seems well ascertained in this poem.

(*c*) A verse of Ayman Al-Asadi, a poet sufficiently late to have imitated Ibn ʿAbbās, a younger contemporary of the Prophet, quoted *Aghāni*, xvi, 45; Yāḳūt, ii, 51—

وصهباء جرجانية لم يطف بها حنيف ولم ينغر بها ساعة قدر

ولم يشهد القس المهيمن نارها طروقا ولا صلى على طبخها حبر

"And wine from Jorjan, which no Ḥanīf ever hawked about, with which no kettle ever boiled, whose fire was never witnessed by faithful priest coming at night, and over whose cooking no Rabbi ever prayed."

The sense of *yaṭuf*, 'hawked about,' seems here secured by a verse of Al-Aʿsha, cited in the *Tāj*, i, 342—

وصهباء طاف يهودِيُّها وابرزها وعليها ختم

It might, however, mean 'made circuit round,' with reference to the ceremony of the Circuit or *Ṭawāf* round the Kaʿbah. Whichever of these be right, the rendering 'Mohammedan' seems correct.[1] Hence from these verses we can learn nothing more than that the name Ḥanīf was commonly employed in the first century of Islam for 'Muslim.'

To these Grimme adds the passage in *Kāmil*, i, 135, where Bisṭām, son of Ḳais, a Christian, says, "I will become a Ḥanīf if I return." Al-Mubarrad seems to interpret the word here as 'Mohammedan,' for he adds in explanation that Bisṭām was a Christian, and that the event occurred after the mission of the Prophet had begun.

Further, it should be noticed that the Arabs (Ibn Isḥāḳ, p. 152) identify the phrase *taḥannuth*, which occurs twice in the Tradition, with *taḥannuf*, which is used with the sense 'to be devout.' There can be no doubt that this word is a derivative from the root which appears in *ḥinth*, 'a crime,'

[1] On the rest of the verses it is unnecessary to comment here, but they need explanation badly.

'perjury,' and that the fifth conjugation has the curious privative sense which is found in the similar verb *taḥarraja*. It seems, however, quite possible that the Hebrew *ḥānēf* may be connected with this root.

Early commentators, quoted in the *Lisan* (and also by Ṭabari in his Commentary on ii, 129), say that Ḥanīfism consists in either or both *pilgrimage* and *circumcision*. In the latter we can see the influence of a Jew who interpreted *millat Ibrahim* as the Hebrew מילת אברהם, or circumcision of Abraham. The former is merely an inference from Surah xxii, 28.

The result of this examination of passages would appear to be that the real sense of the word was known to few persons at the time of the composition of the Koran. The early poets who used the word were willing to gather its sense from the Koran: in the first century of Islam it was commonly used for 'Muslim.' To Mohammed it meant monotheist; and it is open to us to conjecture how he came to attach to it that sense. Whether there were any persons who called themselves Ḥanīfs must remain somewhat uncertain, since the Mohammedan historians constantly interpret the past from notions familiar to themselves. In an interview (reported by Diyarbekri, ii, 144) between the Prophet and the 'Christian' Abu ʿAmir of Medinah, each claims to be a maintainer of the true *Ḥanīfiyyah*: Abu ʿAmir accuses Mohammed of having introduced into that religion matter which did not belong to it. Similarly the other precursors of Mohammed are supposed to have been seekers of the Ḥanīfiyyah or religion of Abraham. Umayyah, like Abu Ṣalt his father, is supposed to be the author of a verse in which it is declared that every religion save that of *the Ḥanīfah* would be shown to be false on the Day of Resurrection (*Aghāni*, iii, 186). To Muʿadh Ibn Jabal the Koranic description of Abraham as a Ḥanīf was applied (*Usd al-Ghābah*, iv, 378), but not before conversion to Islam. He signalized himself as a Ḥanīf by smashing idols, which is curious if the word had even a flavour of 'paganism'

attaching to it. In Ibn Isḥāḳ, 982, Abdallah Ibn Unais describes himself as a Ḥanīf, but explains this as "a follower of the religion of the Prophet Mohammed"—

حنيف على دين النبى محمد

The suggestion which this paper is to put forward is that the names Muslim and Ḥanīf originally belonged to the followers of *Musaylimah*, the Prophet of the Banu *Ḥanīfah*. The word Musaylimah is a diminutive of Maslamah (given to Musaylimah in *Kāmil*, ii, 32; Balādhuri, 422), a name used in Yemāmah and elsewhere, and signifying 'Safety,' being a derivative from a root which is the source of a number of proper names. As we have already seen, names from the same root were regarded to some extent as interchangeable at this period; and I think there would be little difficulty about regarding Muslim as meaning a follower of a man named Maslamah or Aslam; just as we find that 'to Omar' (in the second form) can mean 'to kill Omar,'[1] and verbs of the fourth form are formed from many names of places signifying ordinarily to go there, but sometimes to dwell there. Similarly, the word Ḥanīf might stand for a follower of the religion of a man of the tribe Ḥanīfah, without great straining of the grammatical conscience; different writers speak of the religion as the *Ḥanīf* religion and the religion of the *Ḥanīfah*,[2] and the Ḥanīfī religion, which last is right according to the classical grammar. The names would then correspond with Christian and Nazarene, standing for follower of Christ and follower of the Prophet of Nazareth. How easily the name of the Banu Ḥanīfah can get confused with the religious name appears from a story in Palgrave's *Travels*,[3] in which, after telling the tale of Musaylimah, the narrator says that after his defeat his native valley was called the valley of Ḥanīfah, or 'Orthodoxy.' Doubtless the name of Musaylimah's home was the Wadi Ḥanīfah in the sense of the valley of the Banu Ḥanīfah.

[1] *Kāmil*, i, 229 (ed. Wright, 220, 12).
[2] *Supra*, p. 484.
[3] i, 385.

Probably this is the same as the Wadi Ḥanīf of which Yāḳūt had heard.

Palgrave's *Travels* promise some fresh information on the subject of Musaylimah, whose followers would from that book appear to be not quite extinct. The great traveller asserts that he heard many parodies of the Koran by Musaylimah still recited there, which, however, he did not think worth preserving. This might be true so far as their literary merit went, but for the early history of Islam their preservation would be very desirable. We may, however, doubt whether he heard more parodies than those which shall presently be described, which many authors have handed down.

In the first place, then, does this conjecture (the plausibility of which seems to me to lie in the fact that it explains at once *the two names* Muslim and Ḥanīf) conflict with the chronology of Islam? Certainly we do not hear much about Musaylimah till late in the Prophet Mohammed's career; but then Dr. Hirschfeld[1] has called attention to a tradition in Ibn Isḥāḳ[2] that the Meccans accused Mohammed of having been instructed by the *Raḥmān of Yemāmah*, i.e. Musaylimah. Some commentaries allude to this on Surah xxv, 61 (a Meccan Surah): "When they are told to prostrate themselves to the Raḥmān, they say what is the Raḥmān?" This means, says Baghawi,[3] "the only Raḥmān of whom we know is the Raḥmān of Yemāmah, i.e. Musaylimah the Liar." These statements imply that a tradition existed according to which Musaylimah's career as Prophet was either *contemporary with* or *earlier than* Mohammed's; for clearly the charge that Mohammed was a pupil of Musaylimah's must have had some sort of colour, which it would have lacked entirely if the latter had not come forward till long after Mohammed's quarrels with the Meccans had been settled and even forgotten.

[1] *New Researches*, p. 25, n. 30.
[2] p. 200.
[3] Copied by Al-Khāzin.

The author of the interesting Adab-book called *Alif-Bā*[1] devotes some pages to the story of Musaylimah, and confirms the supposition that Musaylimah was a prophet *before* Mohammed to an almost alarming extent. He assumed the title Raḥmān, this author tells us, before the birth of Mohammed's father, Abdallah, and he lived to the age of 150. Since he died in the year 12 of the Hijrah, he would, according to this, have been 87 years old when Mohammed was born, and have taken a wife in his 148th year, besides fighting bravely and managing affairs with skill for some time afterwards! Yet we learn from the commentator on Ḥarīrī, Sherīshī,[2] that these statements go back to a very excellent authority, *Wathimah, son of Musa*,[3] who wrote a history of the rebellions after Mohammed's death, and whose death-date is given as 237 A.H. by Ibn Khillikan; his work, which would be an early specimen of Mohammedan history, appears to have been known to many Spanish writers, among whom the two authors cited, Sherīshī and the author of *Alif-Bā*, count, but it appears to have attracted less attention in the East.[4] Of course, the statement that Musaylimah lived to the age of 150 must be rejected as a fable, in spite of the early character of this authority, for though the most recent statistics admit the possibility of men living to that age, we cannot well credit a man with taking a leading part in war and politics at such an age. The story that he set up as Raḥmān before the birth of Mohammed's father must also be rejected; for since Mohammed's father cannot well have been born after 550 A.D., as Musaylimah died in 634, even supposing him to have started his career as Raḥmān in his twentieth year, he would have been 104 at his death. Although, then, we must reject Wathimah's numerals, we may follow him so far as to suppose that Musaylimah was well on in years at the time of his death, and for the present purpose it will be sufficient to halve the number 150 and

[1] Cairo, 1287; ii, 244–246.
[2] Cairo, 1306; ii, 191.
[3] Wüstenfeld, *Geschichtschreiber*, No. 55.
[4] Ibn Ḥajar often cites it, e.g. iii, pp. 5, 6, 7, 18.

suppose him to have been 75. This will make him ten years Mohammed's senior, and if he began his Prophetic career in his thirtieth year, his views would have been more than twenty years before the world before Mohammed had his call.

In the histories [1] and books of Tradition Musaylimah first figures as a member of the Legation of the Banu Ḥanīfah to the Prophet. The accounts of this embassy contain a glaring contradiction, causing the familiar device of the harmonist, duplication of the narrative, to be employed. One account makes Musaylimah demand recognition from the Prophet with a promise of succession, for which Musaylimah received a severe reproof. According to the other account, he remained to guard the baggage while the embassy had their audience of Mohammed, who told them that not the worst of them was with the baggage. On the strength of this compliment, we are told, Musaylimah, when he returned to Yemāmah, declared that Mohammed had associated him in the empire of the world with himself. Yet a third story, which is obviously inconsistent with both these, is that Musaylimah wrote from Yemāmah to Mohammed, as from one Prophet of Allah to another, suggesting that they should divide the world between them, to which Mohammed gave a scathing reply.

Of these three stories the third is probably nearest the truth, and we may at least infer from it something confirmatory of the traditions which make Musaylimah start as Prophet before Mohammed, for had he been merely an imitator he would scarcely have ventured on so insolent a proposition; the other false Prophets seem to have waited to come forward till Mohammed was gone. On the other hand, if he had been in the business before Mohammed started it so much more effectively, he might have had some hope that Mohammed would acknowledge his claims to be a Prophet.

Of the sayings ascribed to Musaylimah, probably the largest collection is that put together by the historian

[1] Wellhausen, *Skizzen*, iv, 157 (Ibn Sa'd), etc. The inconsistency is observed by Ḥalabi.

Diyarbekri, who, according to his wont, combines the statements of a number of writers.[1] Some of these are given by Ṭabari, and several are of a style which agrees fairly well with Palgrave's description of what he heard as still current in Yemāmah. The following are some specimens:—"The elephant, what is the elephant, and who shall tell you what is the elephant? He has a poor tail, and a long trunk: and is a trifling part of the creations of thy God." "Croak, frog, as thou wilt: part of thee in the water and part in the mud: thou hinderest not the drinker, nor dost thou befoul the stream." "Verily we have given thee the jewels: so take them to thyself and hasten: yet beware lest thou be too greedy or desire too much." That these three specimens of Musaylimah's style, all of which are recorded with the various readings which never fail where texts are handed down orally, are closely connected with some of the short Surahs of the Koran, is clear; since, however, it is not apparently the intention of Musaylimah to say anything ridiculous, we can scarcely describe them as parodies of the Koran; to the unprejudiced reader they are of the same intellectual merit as the similar Surahs. About the same may be said of some other fragments which are introduced with a variety of fantastic oaths, very similar to the style of some of the Surahs; Musaylimah swears by various animals, and by persons who perform a variety of agricultural and domestic operations, just as Mohammed swears by winds, stars, etc. The question of priority is by no means a simple one: it is regularly assumed by Mohammedans and others that Musaylimah is in these passages imitating or parodying the Koran, but the tradition to which Hirschfeld has called attention, according to which Mohammed in the early days of his Meccan career was charged with having gone to school with Musaylimah, makes it possible that the imitation was the other way. And, indeed, Wellhausen observes with justice that the style of the early Surahs is really a relic of the style of the Arabic

[1] ii, 175, 176.

Kahins, whence both Prophets may have drawn their earliest inspirations. What is clear from the fragments of Musaylimah that are handed down is that there is no tradition of his having imitated the style of the *later* Surahs, which, as constituting the *grondwet* of Islam, should have served as a model to the rival Prophet, if he indeed was merely an imitator of Mohammed.

The great mass of the matter given in Ṭabari and elsewhere about Musaylimah is evidently fabrication; it assigns him certain verses which Sir William Muir rightly characterizes, and tells a whole series of fables showing how when Musaylimah tried to work miracles he always caused mischief by his attempts, whereas when Mohammed blessed the results were always felicitous. Possibly slightly more importance attaches to the statement that Musaylimah was a conjuror, and indeed there is a curious Persian word for conjuring tricks [1] which figures in all these stories, showing that the traditions all come from the same source. He is supposed to have astonished those who saw him by getting an egg inside a bottle, with the use of chemicals, and to have cured wounded birds. Probably these tales all go back to Wathimah, but it is beyond our power to assign them their proper degree of credibility.

Of his doctrines also we can glean very little. Sprenger fancies [2] he was more moral in some ways than Mohammed; but the Moslems declare that he permitted wine, and declared prayer unnecessary. He is also supposed to have consecrated a sanctuary in Yemāmah, bearing some resemblance to that of Meccah; and he is said to have imitated the Mohammedan call to prayer, in confirmation of which a proverb is cited,[3] of which, however, both reading and interpretation are uncertain. Since in any case he was a far less energetic reformer than Mohammed, there would be no difficulty about the supposition that he might have borrowed some details from the more successful Prophet, even though he had

[1] *Nayranj*.
[2] In agreement with Ibn Athīr.
[3] Balādhuri, p. 90.

prophesied at an earlier period. If the story of the call to prayer be true, we should be compelled to admit this, since there seems no doubt that this was a distinctly Mohammedan institution.

What is meant by his being called the Raḥmān of Yemāmah is of course obscure. The fact is certified by Balādhuri, who (p. 105) asserts that another false prophet, Al-Aswad al-ʿAnsi, called himself the *Raḥmān* of Yemen in imitation. There might be something to be said for connecting *this* word with the *Menaḥmānā* or 'Comforter' of St. John's Gospel. In that case he will have even forestalled Mohammed in the appropriation of the prophecy.

The Banu Ḥanīfah were a tribe of considerable importance, since in the year 12 A.H. they could bring 40,000 men into the field (Ibn Athīr, ii, 275). According to Al-Kalbi (quoted by Ḳādī Ṣāʿid, translated by Schefer, *Chrestomathie Persane*, i, 145) they worshipped an idol made of a paste of dates kneaded with milk.[1] "During a famine it was eaten by the members of the tribe, which caused a poet to say 'the men of Ḥanīfah in a time of stress devoured their god.'" This story is also told by Ibn Rusteh (*Bibl. Geogr. Arab.*, vii, 217), and earlier still by Ibn Ḳutaibah (Cairo, 1300, p. 305). Hence they are not enumerated with the Christian Arabs,[2] yet some of them must have been Christians, since Mohammed commanded their envoys to pull down their *Biʿah*, or church (Wellhausen, *Skizzen*, iv, 157); and of some of the members of the tribe this is expressly stated; so of the poet Musa Ibn Jābir (*Khizānat al-Adab*, i, 146), and their chieftain Haudhah, son of ʿAli (Ibn Athīr, ii, 165). In the accounts of their dealings with the Prophet we hear nothing of bishops and priests, as in the case of Najran. Their Christianity would appear to have been of a very rudimentary sort, since the annals of the tribe exhibit a rather *outré* form of Paganism. In a story told in the *Kāmil* (i, 210), ʿUmair Ibn Sulmi, the Ḥanafite, promises

[1] Modern writers on Arabic antiquities seem to reject this. But many religions exhibit traces of the deification of objects used in ceremonies.

[2] And, indeed, the tribe attended the pagan festival at Mina (Ibn Isḥāḳ, p. 283).

protection to one of the Sawāḳiṭ (visitors), who came to his country in one of the sacred months; this was done by writing on an arrow, "So-and-so is my Guest." The guest's brother (a Kilabite) was killed by 'Umair's brother Ḳarīn; the surviving Kilabite took up his station at the tomb of 'Umair's father, demanding vengeance; 'Umair and the other Ḥanafites offer blood-money, but it is refused; they double and treble their offers, but with no better success; Ḳarīn seeks the protection of his maternal uncle, but he does not grant it; and so 'Umair at last ties his brother to a palm-tree, and allows him to be slain. If there be any truth in this story, it shows that conversion to Christianity made very little difference in the normal institutions of Arabia, except that a pagan tribe would probably not have handed the murderer up to vengeance. A story told in *Aghāni*, xvi, 79, of the above-mentioned Haudhah is still less edifying. He was on friendly terms with 'Kisra,' and to please the monarch treacherously murdered a number of Sa'dites. This same man was warmly praised by Al-A'sha (*Kāmil*, ii, 26). The poet Jarīr, whose opinion of them at times was favourable (Divan, i, 28), also satirized them (*Bayān*, ii, 74), and taunted them with being civilized and knowing more about the ploughshare than about the sword, a charge which at the time of their war with Khalid was certainly ill-grounded.

Probably (or rather certainly), then, Musaylimah, like Sajāḥ (Ibn Athīr, ii, 269), whom he afterwards married, got some of his religious notions from the Christians. Indeed, when the Arabs had once learned the Biblical genealogies (and we need not doubt that these were to them as new and important as they were to the Armenians), the notion of going back to the religion of their father Abraham was not far to seek. If the reasons suggested by Sprenger for the dislike of Christianity by the Arabs be sound, the idea that the religion of their father Abraham was more suitable would have suggested itself quite naturally when once the Biblical genealogies had been accepted as a true account of their origin; and of any scepticism on this subject there

appears to be no trace. The notion, however, of restoring the religion of Abraham is more likely to have occurred first in a tribe which was partially Christian than in one of which only a few members had any acquaintance with the Christian religion. It is, therefore, worth while suggesting that the man who first raised the standard of the Abrahamic religion was Maslamah, the Ḥanafite, after whom the Arabian monotheists were at the first called, though not many were aware of the origin of the appellation.

The suggestion, then, which I should offer for the explanation of these terms is that some twenty years before Mohammed's mission some sort of natural monotheism was preached by Musaylimah, whose followers being called Muslims and Ḥanīfs, these words were supposed to signify *monotheist*, and as such were adopted by Mohammed, who, owing to the comparative obscurity of Musaylimah, had at least at first no knowledge of their origin, and afterwards felt bound to assert positively that they were both in use in Abraham's time. The Meccans' taunt that he was instructed by the Raḥmān of Yemāmah may be interpreted as a fairly correct account of the facts, if we suppose Musaylimah's Surahs to have been the earliest Arabic literature connected with monotheism, on which Mohammed modelled his early Surahs; naturally, as we can learn from Hirschfeld and others, he underwent a number of influences during the time in which he composed his Koran, and found it expedient to desert Musaylimah for the Old and New Testaments and the sayings of the Jewish fathers. I fear that in any question of literary ownership there must be a presumption against Mohammed, for in cases where we know his sources he indignantly denies the use of them; hence, where we do not know them quite certainly, there is a suspicion that he is the imitator rather than the imitated. If this be so, the figure of Musaylimah becomes rather a pathetic one. Quite late in life he will have tried to play the part which by right of priority he might have played much earlier, had he had the energy of his disciple. When after Mohammed's death he was in a position to attempt the part of conquering Prophet,

he was near the end of a long life; he acted with remarkable skill and vigour, but the general sent against him was one of the ablest ever produced by Arabia, and his cause was seriously hurt by treachery. If it be true that his name is still revered in Yemāmah, this will be another example of the tenacity with which sects survive.

ART. XVIII.—*The Pahlavi Texts of Yasna X for the first time critically*[1] *translated.* By Professor LAWRENCE MILLS.

Repulsion of Demons, Invocations to Srōš and Aharišvang.

(1) HENCE backward (or 'after') away from here they fly:—hence the daēva Demons and the daēva's friend,[2,3] [and the daēva-worshipper]!

(2); and he who is the good Srōš[4] makes (here) his dwelling[5]; [that is to say, for him there becomes a lodging here].

(3) Aharišvang (also) dwells[6] here; that which is the joy of Aharišvang the Good is[6] here; [(that is to say), there is[6] a lodging for him, or it, here]. Also from him there is

[1] The texts here rendered were printed in the first Heft of the *Zeitschrift* of the German Oriental Society for 1902, as edited with all the MSS. collated, but the variants were withheld to economise space, and will be given (it is hoped) in a future work. Translations into Sanskrit, Parsi-Persian, and Gujrati of texts not collated, and not closely critical, have alone preceded this.

[2] This is, of course, not an exactly accurate rendering of the original Avesta text, for a critical free rendering of which see SBE. xxxi, pp. 240–244, now, however, somewhat antiquated.

[3] Daēvyō (cf. Indian devyás) = 'demonesses' is not properly rendered here. The motive to this error, 'friend,' is not so clear, yet we must notice that the term -aēvyō- of daēvyō- may have called attention to 'av,' the root of 'friendly approach,' whether because 'y' of '-vyō-' was read as often 'v,' or simply because an -avyō- was seen; or indeed, again, a possible adjective in -ya, 'the daēva- devoted one' (?); but the important word 'demoness' was wholly lost, as šedayā-yazak does not reproduce it. Daēvya = Ind. daívya = 'the divine one' would be a singular, and not so forcible a reading. Nēr. follows the mistake of his original. Does the Gāthic Pahlavi make worse errors, if it be an error? For others see below.

[4] The personified 'obedient hearing,' the angel of loyal religious acquiescence. But like all these impressive names founded upon the grander abstracts as seen in the Gāthas, in the later degenerated period of the Hōm Yašt, they had largely lost their original significance. See where xšathravairya comes to mean merely 'the Angel of metals,' Ār(a)maitī merely 'the earth,' etc. *x* = *kh* here.

[5] The word evidently was used to express an entrance upon domicile. The imperative conjunctive mood tense of the original is not expressed. Nēr. follows with this negligence.

[6] The imperative conjunctive is not expressed here; see also Nēr.

joy upon this dwelling which is Aūharmazd's own, and whose also (is) the production[1] of holy Hōm [even His own (is) it (the dwelling, or 'the joy')].

To Hōm at the pressure.

(4) By[2] that even which is the first pressure (of thee) I praise thee on with speech, (thou) who (art) the very wise, when[3] I put within the mortar what (are) thy dried leaves, within, together, [that is to say, (when) I[4] put thee now within (the pressing mortar)].[5]

(5) By[6] even that which is the last (or 'highest') pressure of thee I praise thee forth with speech, O very wise, when with that which is the force of men (with full strength of muscle) I strike thee on[7] (in the crushing cup).[8]

The Homes of Haoma.

(6) I praise the clouds and the rains [also in this same manner (or 'way') in which I am now before saying it (meaning 'in the manner in which I have just been saying it (the praise).' Or possibly meaning 'in the same way declaring it before (?) these hearers,' referring to an earlier

[1] This 'production' (with which I do not agree; see SBE. xxxi) casts light upon that other word rendered by the Pahl. 'born of aša,' but which should be more critically read 'bearing aša'; see below at Y. X, 41 (14). We have only Indian ṛtajā́, etc.; ṛtā́van does not occur in composition in old Indian.

[2] I regard this quasi-adverbial translation for fraterem̆čit as being strictly critical. The original hardly meant 'I praise thy first pressure.' I followed this in SBE. xxxi.

[3] Free grammatical form.

[4] So, freely critical; the 1st person was not deliberately mistaken, as it is correctly rendered by the Pahl. translators times without number.

[5] Here evidently the Priest was supposed to crush the Hōm leaves, or stems, in the mortar to extract the juice.

[6] Again most critically correct, regarding the accusative of the original as quasi-adverbial. Hardly 'I praise thy final pressure.'

[7] Possibly 'I will strike thee'; but the barā seems to express the 'ni' of nigṇē; see also Nēr.'s nihanmi, not a future.

[8] To extract the juice.

occasion or celebration)[1]], which (clouds and rain) cause this thy body to grow upon the heights upon the mountains.

(7) I praise the high mountain where there, O Hōm, thou[2] hast grown.

(8) I praise the earth having (that is, which has) (its) many paths, the wide one, the one devoted[3] to her master's will,[3] the fertile one, who is thy bearer, Holy Hōm.

(9) I praise the land (or 'earth') where thou hast grown, [that place with the fame well known by name], thou having (thou who hast) a sweet odour as a producer of swiftness[4] (stirring the blood and causing activity) [(such) art thou in the world].

(10) So also thine is a good growth of greatness[5] (i.e. thine is a large[6] plant) [that is to say, 'thou art,' O Hōm, a thing which is great ('a large[6] growing bush,' or possibly an important object in view of the sacramental use)] when thou hast grown upon the mountain.

(11) And so thou art given forth[7] upon the many-[8] pathed (place).

[1] This gloss refers, I suppose, to the previous verses beginning with 'I praise.' Nēr. omits it (this gloss). I suppose it was intended to introduce the praising of the objects next introduced after the Hōm itself, which was directly praised in 4 and 5. We might think that some preparatory 'praise' was referred to 'praising beforehand.'

[2] So with the text -iša, as a 2nd singular, but as optative, which is not expressed in the translation; the second personal form is alone recognized.

[3] See the texts for the explanation of this curious error, which recurs at Y. X, 40, Vare- recalled var = 'to choose,' 'to be devoted to'; the -zy- may have recalled -zi-, and -añh- an ahu, añhu = 'lord.' Nēr. follows it. Surely no error of the Gāthic Pahlavi was worse than this.

[4] The translator seems to have had in his mind the stimulating effect of the extract of the Hōm plant as inducing physical activity. I preferred to take the čar of čarānem in its more immediate sense of 'movement' rather than in that of 'production,' i.e. as 'swiftly spreading.' The quick effect of the drink may possibly have been meant in the original, if not here.

[5] I have remarked in writing upon the texts the singular circumstance that Mazdāo is translated masīh there and by A. (DJ.) by 'mas' = 'the great one,' seeing the 'maz' of mazdāo as = 'great,' but the gloss, which may, however, have been of later origin, diminishes the force of the point.

[6] As regards the dimensions of the plant, I am unable to say whether the haoma (soma) bush ever attained to a considerable size. See, however, Nēr.'s mahattarodayaṁ.

[7] See Nēr.'s pradatto' si ff.

[8] 'Many' is, of course, erroneous for viš-, though Nēr. follows it.

Hōm as a source of benefits.

The manifest spring of (ritual) holiness thou art, the clear [1] (one), [that is to say, 'thou dost effectively increase [2] duty and good works']; and thou causest thought, word, and deed to augment [2]; [that is to say, thou wilt make them more straightforward].

(12) (These influences appear as proceeding from thee) on all thy stems, on all thy branches, on all (thy) shoots [(written) so as to be said twice [3]].

(13) Hōm increases when they praise him, and a man who praises him becomes the more victorious.

(14) At even the lowest pressure of thee, Hōm, and at even that which is (thy) lowest praise, O Hōm, and at even the slightest drinking of thee this Yašt is for the thousand smiting of the Demons [a thousand will they (its correctly speaking reciters) destroy].

(15) It causes (the ahō- [4] impurity) to perish at once, and continuously would they do [5] the rest (hardly 'and they would put forth the rest'), (causing the working of) the 'ahō-' [4] impurity (to perish) from that house.

(16) There where they cherish [6] Hōm fixedly,[7] [that is to say, they would do it on [7] (unremittingly)], there where fixedly they praise on Hōm, the healer,

[1] Possibly 'sparkling one.'

[2] Notice that the Parsi idea of 'increase' is always associated with moral excellence. The ascetic principle was carefully avoided.

[3] This is, of course, a rubric.

[4] I would now avoid dividing ahū + kēnišn, 'doing despite to life.' I now recognize the Pahlavi word as ahō, meaning 'vice,' etc., so, entirely of itself and without any expression of the 'malice' in kēnešn-, we should have a common denominative form from ahō(k), ahō kēnišnīh; the 'k' of ahōk would be the frequent quasi-phonetic letter used, as in vohūk for vohū in the citation at Y. IX, 3.

[5] Mistaking frākeresta for frākereta; see Nēr. also. We could hardly render the Pahlavi: 'and they would put forth the rest.'

[6] Nēr.'s somewhat expressive upaçlešyanti may have been induced by the preposition upā in upāzaiti, which may have recalled upaēta. Or was the barā vebedūnāñd, which at the first glance looks so vapid, intended to put force into the foregoing avākēnend, so inducing Nēr.'s rather strong expression?

[7] Notice that the barā of barā vebedūnāñd is here defined by bāstan', Nēr. nityam, as expressing continued action, and not as meaning 'they would do away with.'

(17) Manifested is health and healing in that village, [that is, (manifested is ability for) handwork [1] (there)]; so in such abode [2] [and in such (family) house [2]].

Contrasts.

(18) All other exhilaration [3]; [(the meaning) is that it is necessary to say 'madišn''[4] (exhilaration [4] for him the reciter)] here; (all other exhilaration) is with Aēšm' of the bloody-spear.

(19) In like manner the exhilaration of Hōm is his (the reciter's and the drinker's) with Aša, the one-possessed-of-joyful mind,[5] [(that is to say, with) duty and good works which a man maintains with joy [5]].

(20) Light [6] is Hōm's exhilaration, (and) not a thing this which (is) severe, (or heavy).[7]

(21) When men [8] find Hōm [8] as a young son, [that is, (when) they would afford him protection (better 'nurture' as one does the young)],

(22) forthwith Hōm may meet [9] their body—(as) healing.

[1] This gloss seems extremely natural; and yet it is just possible that the outward shape of the durūstīh, 'health,' suggested the word dast, 'hand,' which with extra strokes would at least suggest durūstīh.

[2] As to the distinctions here made, mān, or mihan, would be naturally the more general term. Nēr. pushes the distinction still further with his prāsāde, which might mean even 'in the palace,' or 'temple.'

[3] The Pahlavi translators omit Zend. 'zi,' not forgotten, however, by Nēr.; see his yatah; the zag ī, of course, hardly takes its place.

[4] It is difficult to see the motive for this gloss. It looks like an insistance upon the reading of a text; some variant may have troubled the transcriber. Nēr. knew nothing of it.

[5] I am not so sure that hūravāxman', pointing to an origin in vraj for urvāsmana, is critically correct. May not a vrāsman = 'brahmān,' lurk here? If such should be the case, we should render 'Aša, the holy, the brahman-like.'

[6] Nēr. laghvī.

[7] Nēr. adds an ityarthah, as if to note that girān was used in some special sense; his *b'āritā, however, conveys the idea of 'severity.'

[8] The singular for plural in the verb should hardly be noticed as other than a freedom. The singular anšutā should be taken as either a collective, or as an instance of mere carelessness.

[9] So, much better than merely 'accept'; see the Avesta, yet see also Nēr.'s samgṛhṇanti; and read as alternative 'accept.' Again, we have a singular for plural with a singular subject. Aside from the original, we should render, 'forthwith let that which is their bodies (i.e. persons) meet (or 'accept') Hōm as healing.' Another solution would be, 'forthwith, O Hōm, do thou meet their bodies as healing' (i.e. healer) (-aūd used like-yēn at times for the 2nd singular imperative), but see the original.

Personal.

(23) Hōm, grant to me the healing (by) which thou art a healer, [that is to say, (by which[1]) it is possible to thee to give (the healing)].

(24) Hōm grant to me the victory by which (by which, such victories) thou art a conqueror of hostilities[2] (that is 'of the enemy') with victory.

(25) Forth from thee I would accept friendship and praise, [that is to say, 'I will be thy friend,[3] and I will praise thee']. For (or 'to') him (that is, 'to a person') I am a friend who is good, (that is to say, 'effectively useful on account of being a praiser' (either 'in return for it' or 'by means of it')). To me Auharmazd said it, [that is to say, by me a benefit has been given] above[4] Aharāyīh the excellent (that is, above Aša Vahišta). [That is to say, by me an officer of the Religion who is good has been presented (better) than[5] the Religion itself; for even the progress of the Religion must take place by means of the officers of the Religion.]

[1] Nēr.'s 'yaiḫ' supplies these needed words.

[2] Nēr. does not render bēš. The Pahlavi translator, followed by Nēr., here distinctly expresses the matured meaning of the original, but only in one item. Literally we might render the original: 'Haoma, grant to me of the fiend-smiting powers, by which thou art a fiend-smiter.' But 'fiend-smiting' evidently came to mean merely 'victory'; so the Pahlavi. On the other hand, the translator renders 'verethra' with bēš = 'hostility,' not 'victory.' It is often hard to say which we should prefer, 'fiend-smiting' or 'victorious smiting.' We must note that vṛtrá at times means 'victory,' etc., in the R.V., and even 'defensive victory,' from var, 'to enclose.' But cf. R.V., 1, 91, 5, 'Tvám somā 'si sátpatis tvám rā́jo 'tá vṛtrahā́,' etc. Of course, the original * meaning of vṛtrá (verethra) was 'the enclosing demon serpent,' who 'enclosed' the clouds and kept off the rains.

[3] A clearly alternative and improved translation; 'min lak' is almost senseless. I would even accept it as a pure genitive; see Nēr., and take mekadlūnam-ī in the sense of vīsāi = 'I will become,' if it were possible; see Nēr., however, who has 'forth I meet thy friendship and thy praise.'

[4] I have little doubt that Šapīr min aharāyīh means 'better than A.,' as in the Semitic languages; see also Nēr. Otherwise we should have 'to me good has been given from A.' 'I have given from A.' would be very flat.

[5] So šapīr . . . aēγ means 'better than.'

The Inspirer.

(26) Swift and wise; God-fashioned art thou, well-skilled[1] for the spiritual interest (or 'purpose'); (meaning 'thou hast efficacy for the interests of the future life').[2]

(27) Swift[3] art thou and wise, God-given,[4] well-skilled for this world.

(28) On Albūrz is thy giving forth of signs,[5] (the signs of thy presence) through the bountiful ones[5] (the Amešaspentas), since theirs thou art made through the sign[6] of the birds.[6]

(29) And the birds apart, apart,[7] would bear thee on upon the dreadful (precipices) of the distant[8] eagles.

An Interruption.

(30) No Pahlavi translation of 30 has been handed down.

A. (DJ.) has: 'this vāč (i.e. 'word,' or 'section,' possibly 'this vāj,' 'prayer section,' in so far as the interpretation is concerned, has not been said.' DJ. has further ' . . . the name of that hill-place and desert-place upon which Hōm has grown.'

[1] I fear we must report the Pahlavi translator as referring the word rendered 'well-skilled' to Haoma, and not to the Deity, with Nēr., who has a nominative form; that is to say, unless we can understand a 'pavan' before baγ = 'Swift and wise art thou fashioned by God, (He being) well-skilled as regards the spiritual interest, the heavenly world.'

[2] See Nēr.'s paralokatayā. Even 'immortality' was thought to be given through drinking the Hōm; so said one of the commentators; see Y. IX, 5.

[3] Hardly, 'Swift, O thou and wise (as) a god, thou hast given. . . .'

[4] The remarks upon 26 apply here again, 'by God art thou created' would require a 'pavan' understood. I should be pleased indeed to hold that 'well-skilled' here applied to the Deity as in the original and as in Nēr.

[5] This is erroneous, of course, as applied to the Amešaspentas.

[6] The 'sign' here should be understood as indicating 'intelligence' or 'instinct.' In the original I cannot see this simple sense of 'sign.' See SBE. xxxi, free and critical. Here the birds were regarded as conveying 'omens' with regard to the Hōm, as the word *hū-merv* means 'well-omened.' With more commonplace we may understand that the birds by hovering near pointed out where the Hōm was growing.

[7] I do not see why 'apart, apart' is not a very good rendering for 'facing apart in different ways.' I was inclined to render 'of different kinds' here in the Pahlavi; but see the original in SBE. xxxi.

[8] So perhaps, better than 'beyond the eagles,' as I formerly rendered the original. Read in my translation there for 'beyond the eagles,' 'where distant eagles circle,' so with critical freedom for the literal 'to the mounts having the above (the high-soaring or 'the encircling') eagles,' upairi-saęna; though I correct myself with diffidence. Yet see also staęrō-sāra as a compositum.

D. has: 'This vāč, in so far as the interpretation is concerned, has not been said.'

K[5] (Sp.) has: 'This vāč, in so far as the interpretation is concerned, has not been said,' adding, 'the very name of that place thou hast given in the midst of which Hōm has grown.'

Nēr. has: 'This, so far as the interpretation, has not been written.'

The Exuberant.

(31) In that place hast thou grown on, full of sprouts,[1] and of many kinds, O Hōm, the exuberant,[2] the green of hue.[3]

(32) As having thy healing joined[4] with thee, thou art a healing (one) according to the measure[5] of Vahōman, (that is to say, 'a healing arranged and made complete as animated by benevolence') [to such a degree as it is necessary for it to be made complete; and not so as when in the case of the cutting of a trouble (i.e. as in the case of a surgical operation), for that is when for the sake of the healing of a trouble (in the attempt to heal it) one kills a person; (the non-surgical healings of Hōm are, on the contrary, never fatal)].

[1] As seen from SBE. xxxi, p. 242, I compare Indian párvata, for paurvatāhva = 'mountains,' and not párus, 'joint of plants.' But then párus and párvata originate from the same idea, that of 'swelling'; the Pahlavi translator might so indicate. Nēr. certainly errs here with his pavitra-nikarešu. He seems to have read pāk instead of -tāk, or 'pūr' in the sense of pavitra.

[2] So more literally; but Nēr.'s gaulya may give us the better meaning 'pleasant'; hardly, however, 'sweet.'

[3] 'Now thou growest,' twice repeated in SBE. xxxi, p. 242, 12, was inserted as stated on p. 231, "to point the sense and round the rhythm."

[4] See the texts and read yēm haē, having an eye upon Y. XXX, 3. Otherwise reading yōm aē, 'This thy healing is this day . . . .' Or with yōmīhā, 'days' or 'daily.' Nēr. favours yēm haē with his arogyayukto'si, '-yukta' pointing to yēm as referred to yamá = 'paired.' But what was the motive of the idea 'joined,' 'mated,' 'doubled'? I can only suggest that the idea of flowing may have suggested fusion, or 'blending,' and so 'uniting.' Of course, we see the 'doubled' syllable -rīri- in irīriθare, which might have suggested the idea of 'pairing' to the earlier 'searcher.'

[5] Patmān = measure; Nēr. pramāṇena is, I think, far too pallid of mayābyō, for which I compare, of course, Vedic māyā́ = 'superhuman wisdom' or 'cunning,' i.e. 'acuteness.'

The Advocate.

(33) Wherefore for me that curser's thought (is)[1] bound from after him.

(34) That which is the thinking of his thought [tell me[2]] when he stands against me with cursing, [that is to say, he declares to me the thing which is revolting to him[3]].

The Consoler.

(35) Praise to Hōm, through whom they would make[4] that which is the poor man's (feeling), so much good spirits (lit. 'mental greatness') as that even of the rich, [since to that one, (that is to say, to the poor (man)) there is joy from a little thing such as to that other (the rich one) results from a matter of importance].

(36) Praise, O Hōm! through whom they[5] would make[5] the poor man's (feeling) so much fresh good spirits as though

[1] I should like to put the sentence in the conjunctive imperative of deprecation to correspond with the original and with Nēr.'s 2nd singular imperative. But the terms do not warrant it. It would not be at all fair to take the bāt (bād), which is a mere variant for asrūnast, as if it were a 3rd singular conjunctive of būdan. B. (D.) omits it. Vaepaya is, of course, totally mistaken here: something in the outward form, probably the syllable 'pa' in paya, suggested bāt to someone in the long line of translators. Or does not this bāt of the Pahlavi translators supply us with the proper reading of the original 'b' for 'p,' so giving us some form of bi = bīš, vibāya, 'Cause us to be in terror (?).' Vaępaya could also mean 'make us tremble,' or 'terrify (us)': 'Drive from us through terror,' or 'cause them to cast from us.' Nēr. renders a vaępaya well enough with his parivartaya.

[2] Here the translator supplies the verb as 'tell me,' 'yemalelūn am.' I did not hesitate in SBE. xxxi, to regard vaępaya as the word to be understood.

[3] Not, as we might at first sight suppose, 'He declares the thing which is revolting to be commendable' (lit. 'goodness,' xūbīh for aŭvaš). Nēr. knew nothing of xūbīh; and we should beware of smoothing out matters in an ancient commentary like this. See the original, which is ignorant of such an idea.

[4] Although vebedūnāñd is a 3rd personal, so corresponding to kerenaoiti, yet I think in view of Nēr.'s karoši that we have here a use of the form in -āñd such as when it expresses (though, perhaps, in a roundabout way) the 2nd singular imperative. As forms in -āñd can express the 2nd singular imperative, so this may express it. Read as alternative, 'thou who wouldest make the poor man's (feeling),' etc. Notice vebedūnyēn in this sense at 37.

[5] Have we -yēn for the 2nd singular imperative in conjunctive sense here also? 'thou, who wouldst make.' But see the 3rd personal of the original.

he (had) reached (material) satisfaction,[1] [that is to say, as much as there is gratification from the authority of the chief Mobad (as much as) from the Yašt-celebration. His also is gratification in that way].

(37) Man-full do[2] thou make (him) [a man so much[3]] an increaser of prosperity [do[3] thou make (him)], and a sagacious[4] friend,[4]

(38) Who continually mixes thee with milk,[5] O Hōm, the yellow [(uttering the text) 'of holy' (or 'correctly spoken') words[6]], and who partakes of thee in a (regulated)[7] portion[7] (or 'as a share'[7]).

(39) Do not go quickly from me like my dripping[8] cow (i.e. like the drops of the milk) from the rain[9] (i.e. on account of its being diluted or 'washed out' by the rain), [that is to say, may he, Hōm, abide in this place; and may

[1] As to xūrsandīh for usnām, I ventured to differ. That Nēr. omits xūrsandīh, has no force, since he has nothing in its place. It is quite possible that xūrsandīh, was suggested by the appearance of usnām while the latter stood in the Pahlavi character. With a very simple sign before it, it would be 'xūrsan-.' 'Satisfaction,' however, renders 'culmination' well, if only accidentally.

[2] See the note above upon 35; the 2nd singular is undoubted here; see kerenūiši; though I am of the opinion that this use for a 2nd singular came from an indefinite sense given to the 3rd plural, 'they would make' = 'persons should make,' and so used for '"you" make' in the indefinite sense. 'You should make,' as equalling 'one should make,' is near to 'make thou.'

[3] Nēr. omits this repetition, showing that it very probably did not exist in the MS. which he used.

[4] This error arose from the fact that -vastarem was separately translated, -vastarem being probably referred to a root 'vas,' either meaning 'to nurture' or 'to befriend.' Nēr. follows the mistake with his sahāyinaḫ. A 'learning-friend' would be too literal. Nēr. has nirvāṇajñāna- = 'wise as to nirvāṇa,' 'the end,' or 'Heaven.'

[5] We must necessarily render bisrayā as 'milk' here; 'mixed with meat' would not do. Cf. R.V. v, 37 (391), 4, ná sá rā́jā vyathate yásminn índras tīvrā́m sómam píbati gósak'āyam, 'the King suffers no evil in whose (house) Indra drinks sharp soma mixed with milk . . . .'

[6] A citation probably from Y. IX, 79. I regard the word pāk = 'pure' as a gloss to the arš of aršūxtanām; or it is a piece of débris from another and older translation?

[7] My word 'regulated' is hardly needed. 'Pavan bahar' seems to have been added merely for emphasis.

[8] It is not at all necessary to follow Nēr.'s ridiculous blunder as to the 'cow-banner.' The scholars of his day, of course, so read the Pahlavi, but the original, if correctly referred to Indian drapsá, is decisive. The Parsi-Pers. MS. does not translate here.

[9] It is better not to solve vārom as 'vār,' 'am,' 'rain' . . . 'from me'; see vārema; it is a transliteration.

it not be possible that on account of sin toward thee[1] even,[1] he (Hōm) may not be a guest in my body].

(40) Pour forth[2] to me[3] this which is thy thought (or better 'thine exhilaration'), [that is to say, effect a possession of it for me]; also 'cause[4] me to come to the mastership[4] of thy will,'[4] [that is to say, effect a desire for me (or 'in me') which is in accordance with thy mastership, together with that which is in accordance with a righteous mind].

(41) To thee, O Hōm the holy, who art the holy born,[5] would I offer this my body which is seen to be [complete], well-grown.

Abjurations.

(42) Also I would[6] exclude[7] from thee with smiting; [that

[1] Or, reading mā for lakič: 'In this place may he stand, for not possibly for the sake of sin may he come'; i.e. 'may he not for the sake of sin be a guest in my body.'

[2] So I prefer as to the grammatical form, as against Nēr.'s prabravīmi; see the 2nd singular imperative immediately following. Fravām is probably erroneous, from an erroneously read text; though 'pour forth' is a good (accidental) rendering for frayañtu = 'let them flow forth.' We should not forget that 'y' is often written like 'v,' so that frayan- may have suggested fravam-, as the nasals 'n' and 'm' are often confused, and may have been once expressed by something like the Sanskrit anusvāra; cf. ašhaum, which was impossible as an original and vernacular expression, the word being, of course, ašavan.

[3] Reading 'fravām am' as more in accordance with the original. With fravāmam; see Nēr.'s prabravīmi, read 'I pour forth.' Reading franamam, 'I bend forth in worship toward that which is thy . . . .' Nēr.'s prabravīmi, while, of course, looking at first sight more like a translation of fravāmam than of franamam (to-nam), is not yet decisive for '-vam,' as prabravīmi means also 'I praise,' which would translate '-nam.'

[4] While 'cause me to come' preserves at least the root of jaseñtu, 'the mastership of thy will' is almost comical for varez-. The vare- was referred to var = 'to choose,' and -āoñhō to ahu, aŋhu, = 'lord,' while the 'z' of varez is lost sight of. Nēr. follows the mistake also elsewhere. It is possible, but not probable, that -aŋh of varezyaŋhāoñhō may be meant by -kāmak and -āoñhō by axūīh, but I hardly think so, unless, indeed, both '-āoñhō' and '-aŋh-' were meant, which is very possible, by the single translation.

[5] I could not accede to this opinion in 1887 in SBE. xxxi, nor can I now. 'Holy-born' would be more naturally ašaza = ṛtajá than ašavaza-, which would be ṛtāva-ja (*sic*), or ṛtāvan-j-. Ṛtávan occurs seldom, if ever, in composition.

[6] Avaŋharezāmi is 1st singular conjunctive.

[7] Treating the reading -šedkōnāñd (so B. (D)) as representing -ānī (-āñd often represents -ānī); see also the reading šedkōnam-ī, we could avoid rendering -āñd as a 3rd plural conjunctive. 'From thee,' if the thought is of Haoma; 'thy,' if the thought is of 'the evil' being really addressed.

is to say, I will abjure from thee] the crowd[1] of wretches, the nest of evil ones. [Some say thus:[2] "This thou dost (meaning 'do thou') exclude from thee"[3]],

(43) who think thus: [I deceive[4]], and they deceive even the Fire-priest, [and those who would pursue priestly studies under him]; and they say even of him who is the Hōm (priest) [and who would celebrate the Yasna]: "Do thou[5] completely destroy them all by that deceit,"[6] [that is to say, "Do thou[5] render (him and them) bereft of knowledge"].

The False Partaker.

(44) She who so eats (literally, whose is the[7] eating of)

[1] Reading 'gūndīn ī marān.' Reading this 'gōn-' we might have 'the stench ('gōndīn') of the snakes,' as a figurative expression, or 'the evil smelling one of the wretches.' Reading vāvanēnd as being meant for vāvanēnī, 'I repudiate and I will conquer.' Reading xūrsand, 'I will repudiate the one content with the miscreants' (or possibly 'contenting the miscreants'). Exhaustive treatment is absolutely necessary here.

[2] The translation errs, as I hold, grievously, Nēr. following, first as to janyōiš, then as to ūnām (Nēr. çreṇim), while I think evītō xraδayāo is not rendered. Not so Nēr., who gives us: "Cast down in a blow of destruction, the party of homicides, of confused intellect, the set 'of the low ones.'" As to janyōiš, see SBE. xxxi. I refer it to 'jánī' in an evil sense here as elsewhere in the Avesta; not necessarily so, however; see below at 53. As to unā̊m, I referred it to vedic ánūna (-nās mádās, etc., 'from which nothing is lacking'; ūnay, to ūnā; cf. ūnāyīḥ, RV. 53, 3).

[3] The gloss 'some say,' etc., is valuable from the fact that it formally presents an alternative translation of the clearest nature. Whereas avaŋharezāmi had been rendered first as a 1st personal by the MSS. A (DJ), B (D), D (K[5] (SP), this gloss suggests a reading of šedkonāñd as 2nd singular imperative, which it might express; and that would have in view an avaŋhareza as 2nd singular imperative, erroneous, as I think, of course, but interesting, and distinctly of importance to show the presence of alternative treatment.

[4] This gloss is natural enough; but does it point to -ēnd in firēbēnd as representing -ēnī, a 1st personal conjunctive, as -ēnd so often represents -ēnī?

[5] How the 2nd singular imperative came to be thought of here can only be accounted for upon the supposition that that nasyę- stood apart from 'iti'; Nēr. follows.

[6] Frīf' (or frēf') is, of course, not an exact grammatical form of dapta; but the inexperienced reader should understand that I do not carry my *polemik* against the traditional renderings so far as to expect unvarying exactness in the grammatical forms. Nothing could be more feeble as a procedure than to criticize severely the inexactness of grammatical forms in these ancient renderings, which have come down to us as best they could.

[7] Did the translator actually see a present participle nom. singular feminine in nižgāoŋheñti; and have we possibly here a case of a present active participle with the nasal preserved. We must remember that all the nom. singular feminine forms of participle present in -atī were possibly (or probably) once '-añtī.' The -eñti as 3rd plural here would have to be corrected. Nēr. did not see a verbal form.

that which is Hōm's feasts, and so puts upon[1] (the place for offering or 'for the repast,' that is to say, who 'dishes') Hōm's drōn; [that is to say, she does not sacrifice; and yet eats (at home?)], not by this is there for her a priest's son; (that is to say, she does not become the fruitful wife of a priest through this defective use of the Haoma).

Also the birth of many sons[2] (lit. 'good sonship' (*sic*)) is not given to her [in any other (way[3])].

Hōm's Five-fold Offering.

(45) With the five-fold named[4] (ones, (or 'one')) am I; and with the five-fold named (ones) am I not; [with five persons[5] is (my) lodging[6]; and with five persons[5] is it not] . . . ;

(46) With that one whose[7] (or 'which') is the good thought (or 'who is the one who thinks aright') am I, and with that one who[8] is the evil-minded[8] am I not.

[1] I cannot accede to 'puts upon' for the original, which should mean 'sits.' For 'places' we should need the causative. Nēr. understood by the word 'announces,' whereas the Pahlavi should mean something like 'dishes' (the offering).

[2] Or 'the birth of good sons,' but hū = sū has often the force of 'many'; cf. suvīrya.

[3] Possibly meaning 'beyond any other (woman).' 'By another,' or 'second' (husband), is hardly probable. Nēr. has 'something else besides.'

[4] Pañč-le-gūń-šēm having the force of a compositum. This word šēm is a refreshing blunder. Šēm translates (?) the end of the genitive plural termination -nām of pañčanām! Ner. curiously does not follow it. Were his Pahlavi MSS. without it? or have we his extremely interesting refusal to follow the error of his texts?

[5] See the blunder of šēm perhaps corrected by the aīš of the gloss.

[6] I do not think that the māhmanīh, or 'mihmanīh,' of the gloss is another blunder. My 'lodging' would be a 'chez moi,' and is quite natural as a rendering of havam = 'I am' in the text. The glossist did not see a form of 'man' = 'to dwell' in -anām.

[7] Or 'which is the good thought'; yet the original may be read as a personal, 'to the one endowed with good thought.'

[8] Or 'which is the evil mind.' Nēr., however, preferred the personal idea in both cases; see his very clever sumatīni, durmatīni, from sumati, durmati; cf. ab'īmātīn from an ab'īmāti = 'plotting against,' and atithīn from átithi = 'wandering.' See the personal concrete ašaunō, i.e. ašavanō, 'of the saint,' just on below. Some might, however, think that the personal concrete word 'saint,' occurring after, leaves room for the abstracts above. It is, however, on the whole, best to render terms in as personal a sense as possible, avoiding the abstracts.

(47) With him who is the (man[1]) of good speech am I; and with the evil speaker am I not.

(48) And with him[2] who is of the good deeds am I, and with him of the evil deeds am I not.

(49) With him who is the obedient hearer[3] am I, [who has[3] (or possibly 'who maintains'[3] (or 'accepts') the Destoor)] am I; and with the recalcitrant[3] am I not, [with the one who does not possess[4] (or 'maintain') the Destoor].

(50) With him who (is) the holy[5] am I, and with him who is the irreligious am I not.

(51) Therefore even so (it is), from that (time, or 'from that state of things') until the end, when there is, (that is, when there shall be) the discriminating decree of the spirits [to me this thing (is) so; (that is to say, it shall continue thus to be)].

Doxologies.

(52) Thereupon[6] said Zartūšt to him: Praise to Hōm made by Aūharmazd; good is Hōm, the Aūharmazd-made one; praise to Hōm. [Again, that is to say, away[7] upon the praise] he goes from him; (that is to say, the apparition vanishes with the sentence 'Praise to (Hōm)'); (that is, when it is uttered).

[1] As before, these terms may be translated as abstracts. The originals might also be read as abstracts; so I preferred in 1883–6. Nēr. prefers the concrete and personal concept again as before. Dūshūxt as = dūš + hū + uxt (?) is interesting; or is it 'dūšāūxt'?

[2] As before, we might render in the abstract 'with the good deed'; I now prefer the personal concept. So Nēr. also prefers the personal once more.

[3] Notice that srōš and asrōš are taken in the gloss wholly as concrete and personal, 'maintaining,' or 'not maintaining the Destoor.' Nēr. has again the personal concrete form as before.

[4] Nēr. has, 'who takes' or 'accepts' the guru. Perhaps yaxsenūnēt' may merely mean 'who has a Destoor.' This, however, would be flat.

[5] We must understand the expression aharūv' (aharūvo), 'holy,' as expressing 'orthodox punctiliousness' backed by good conduct and principle.

[6] I think that 'af,' usually meaning merely 'also,' should be here rendered in the sense of āat, the original.

[7] At the first glance one would suppose this to be a rubrical direction; "again the priest renews, or repeats, the formula of praise." But if Nēr.'s tarohitaḥ is to be read as ordinary Sanskrit, we have "(he has) 'vanished' again upon the completion of the praise." Hardly "Do you depart again to his praise," which makes but feeble sense. "Do ye go again to his praise" should be "do ye 'come' again."

(53) All the Hōms would I praise on, those which are upon the highest mountains, those also in the leaf-grown[1] clefts, and the Hōm which they have even for distress[2]; (for instance), that which (has reference) to the harlot[3] (see above). [With her there is distress from it (the Hōm) when to her they would do an improper[4] thing by means of it (or 'toward her')].

Libation.

(54) When I shall pour what is within the silver basin over into the golden one, [that is to say, (when) I will cause thee, (O Hōm) to turn from the Zaothra-bearers on to the two cups[5]].

(55) And I do[6] not cast thee upon the ground so glorious, and so precious (as thou art). [(The meaning) is 'thy value is thus like a clever[7] man' (alluding to the bodily form in which the apparition made itself manifest).]

The Holy Texts.

(56) Those, O Hōm, are thy Gāthas.[8] [As gratification results to thee, and also to the other Bountiful Yazads from these Gāthas, thine is (also) gratification from this Fargard[9]]; also thine those (Gāthas) are, [i.e. thy praise is this Fargard].

[1] Rōdīt-tāk, or Rōsttāk, is, of course, a blunder for raonām = 'of the valleys.'

[2] So, mistaking the sense of āzahu, which throws the whole translation into disorder.

[3] I do not hold this to be correct. Jainī is here used in an ordinary or 'good' sense; see my critical free rendering. The word 'havat' may be the auxiliary to a past participle understood, or it may introduce the following gloss in the usual sense = '(the meaning) is.'

[4] I do not see what renders derezāhu, unless it be that the word looked in its original form like dregvañt; and so was rendered avarūn', but this occurs only in the gloss. The mistake as to a āzahu threw all into confusion. Derezāhu I refer to darz = 'to bind,' Ind. darh, dṛṁhati.

[5] Nēr.'s text is here in a hopelessly shattered condition.

[6] The prohibitive conjunctive form is not reproduced; Nēr. likewise omits it.

[7] Referring to the stimulus of Hōm as awaking the intellect.

[8] I hardly think the Gāthas themselves were referred to. The words are here used of the Haoma Hymn, which is, of course, made up of separate pieces of various dates.

[9] Section.

The Nīrang and its Rubrics.

(57) These are thy teachings[1] (possibly 'thy feastings') of whatsoever sort (of the various detailed usage). [The Nīrang offering is (here) eaten three times (that is to say, in three portions). The pieces that are left (lit. 'of the end') are thrown away.] Also thine are those which are the drōn (offerings) of the (exactly) correct (ritual) words. [And thy drōn, (O Hōm) is this Fargard. This (as above stated) Māhvindat (so now preferring) said, (i.e. delivered as his opinion). Dāt-ī-Aūharmazd said: '(the meaning)' is this: 'Those are for thee, O Hōm, (those) my Gāthas, and that three-fold (thrice repeated) Ašem vohu, is thine. Also thine, O Hōm, is that which is the praise of them (that is, the actual use of them in the laudations of the liturgy); thine also is the teaching[1] (or the 'feasting'[1]) of whatsoever sort. Also thine, O Hōm, are the correctly spoken (ritual) words.' Both, (that is to say, the Ašem Vohu; and the ritual words above used when the offering was made; perhaps the words 'Praise to Hōm,') both, are to be repeated twice.]

An Interruption in the Rendering.

(58) The translation of this section has not been handed down to us.

Nēr. states the fact: "This section is not extant." He uses the word nāste = nā'ste (not 'tāste').

Haoma as Health and Victory.

(59) Upon the acquisition of health and victory heal thou with healing, [that is to say, keep (thy people victorious) and well].

[1] Possibly of 'feastings' (?), as one might suppose Nēr. to have meant with his āsvādanāḥ (read āsvādāḥ). So indeed most naturally; yet see āsvādaya, used by Nēr. for teaching, elsewhere; see Y. 32, 5*c*, etc. Even at Y. 32, 8, this should be the meaning.

(60) These are for me, and thou art also. Do thou[1] pour forth this which is thy brilliant exhilaration (i.e. sparkling drops, which convey the coveted exhilaration); yea pour forth this which is thy lightly moving exhilaration (perhaps meaning 'thy foaming liquor'), [that is to say, grant[2] me lightness (or 'vivacity of spirits')]. They (these influences) cause that which is thine exhilarating (liquor) to flow (lit. 'make it go,' or 'fly'; (hardly 'make it bear (me on)').

(61) The Zōt (Zaotar, speaks): Victorious art thou when they praise thee also with[3] a word; (that is to say, 'a formula') spoken in accordance with the Gāthas,

Rewards.

(62) (That is to say, when they render) praise to the Kine; that is, who provides (the Herd also) with water and fodder, milk and young (fatlings) are his from the worship of the Herds.

(63) Also his is (free) utterance (or possibly 'reputation') on account of the Herds, and his also is victory from the Herds.

(64) Also food (comes) to him from the Herds, and also clothing from them.

(65) [It is so as is said in the Gāthas[4] thus: "He who gives praise to the Herd, to him comes praise from the Herd."

(65*a*) Here at the end I say thus; that "he who praises Hōm, becomes the more victorious."[5]] He[6] who is Herds-

[1] This, while affording a good meaning, indicates an error in the text; fravām arose from mistaking fraya- for frava. Recall the frequent interchange of 'y' and 'v.' Of course, fravām, if it be the true text, is a 2nd singular imperative, see the gloss in the 2nd singular; yet Nēr. seems to have read fravāmam, see his prabruve (always remembering, however, that he may have read franām (am), for prabruve could mean 'I praise' as well as 'I speak forth').

[2] Notice the 2nd singular present for 2nd singular imperative. Or shall we clumsily render 'thou givest'?

[3] Nēryosangh's 'sarvaṁ' is hardly correct for 'ham' here; see the haθra of the original.

[4] Referring to 61, "zag ī pavanič gāsāṅ gūft'." This 65 should be considered as gloss, as is indicated by the brackets.

[5] This should be considered to be gloss; see above, Y. X, 13.

[6] See Y. 48, 5.

guardian (a man) of activity, cultivates food for us, [that is to say, he keeps it back in store for us].

Though I pursue such a rigorous critique upon this very interesting document, and report that a tame submission to these traditional renderings is out of all question for those who wish their labours to have a permanent value, I am just as decisively forced on the other hand to demand a complete proficiency as to their suggestions of all writers who pretend to exercise authority upon the subject. It is quite as gross an error to abandon the attempt to understand them, as it is to follow them too closely. They were our first teachers; and notwithstanding all the defects of shattered, time-worn texts, they really gave us our first lessons as to all we know.

Attention is again called to the great difference between the subject-matter of this later Avesta and that of the Gāthas.

ART. XIX.—*Setavyā, or To-wai.* By W. VOST, M.R.A.S.

THE Chinese pilgrims tell us that a *stūpa* was erected over the "relics of the entire body" of Kāśyapa Buddha at a place which Fa-hian names To-wai, and locates 50 *li* to the *west*, or according to Yuan Chwang, who does not name the town, at a distance of 16 *li* (the *Life* gives 60 *li*) to the *north-west*, of Śrāvastī city. Both pilgrims, therefore, agree in placing the *stūpa* of Kāśyapa Buddha to the *westward* of Śrāvastī city.

To-wai is, without a doubt, Setavyānagara, as the circumstance of the enshrining of an unbroken skeleton is "not related concerning any other Buddha" (Hardy, *Manual*, p. 88) except Kāśyapa. (The correct spelling should probably be Kaśyapa, with the first *a* short.) The *Buddhavaṁśa* affirms that the Kaśyapa *stūpa* was located in the Sētawyāno garden in Sētawyānagaram (*J.A.S. Bengal*, vol. vii, 1838, p. 797), and adds that the bones of this saint did not become disjointed even after cremation. It is remarkable that the identification of To-wai with Setavyā has eluded the notice of the various translators of the itineraries of the pilgrims, and of scholars who have sifted the pilgrims' accounts for the rich store of geographical information obtainable. For the reasons given I disagree with Mr. Vincent Smith's suggestion (*Remains near Kasia*, p. 4, note 3) that Setavyā will probably prove to be Sāheṭ Māheṭ.

To-wai, not unlikely, is an attempt to reproduce in the Chinese character Sa-a-va-ya, that is, Satavaya, in which *t* had become elided, and with the sibilant pronounced like *th* in the English word *theme*. At present our stable servants of the Chamār caste, in the east of the United Provinces, similarly pronounce *bīhīshtī*, 'water-carrier,' as

bīhīthtī, but sometimes as *bīhīhtī*, and other sibilants in like manner; and raw Gurkha recruits from Nepāl say *thāhib*, instead of *ṣāḥib*, 'master.' In both instances the sibilant= *th* as in *theme*, and is in common use wherever the Bhojpurī dialect is spoken. I suspect that in Burma 'Kothambi' and 'Wethalie,' for Kauśāmbī and Vaiśālī (Bigandet, *Life of Gaudama*, vol. i, p. 234), are similarly sounded.

It is said that Gautama, on leaving Śrāvastī for Rājagṛha, passed in order through "Sétawya, Kapilawastu, Kusinára, Wisálá" (Hardy, *Manual*, p. 347). From this record the inference, which doubtless is incorrect in view of the testimony of Fa-hian and Yuan Chwang, would appear to follow that Setavyā was situated to the *south-east* from Śrāvastī city on the road to Kapilavastu city, which lay a long way to the south-east. It would be of great interest to learn if there is any definite statement in the Pālī books as to the *bearing* to Setavyā from Śrāvastī city. Setavyā is, not improbably, too, the same as Satiabia in Kośala, the town mentioned (Rhys Davids: *Buddhism*, 1880, p. 72) as that at which Gautama spent part of the eleventh year of his ministry.

Scholars may still desire to leave undecided the question of the exact position of Setavyā or To-wai with respect to Srāvastī city, and to keep an open mind as to whether Śrāvastī and Sāheṭ Māheṭ are identical, or whether Śrāvastī city was situated under the hills where the Aciravatī or Rāpatī river reaches the plains. As promised, I, therefore, send notes of two ancient sites to the eastward of Sāheṭ Māheṭ in the Gaŭḍā (Gonḍā) District, which I believe are worthy of mention, as the places seem to me to have been of some importance.

Bā̆seḍīlā, about 27° 24′ N., 82° 20′ E., and six miles east from Balrāmpur or about seventeen miles from Sāheṭ Māheṭ, is the name of a village which lies on the eastern side of a series of mounds, which cover a space close on 1,000 feet in length and the same in breadth. The trigonometrical station shown on the large-scale map stands on the western edge of the remains. The ruins are within a short distance of the

right bank of the present bed of the Rāpatī river, but formerly this river bordered on the west and north sides of the site, which looks as if it had been surrounded on all sides by straight and correctly oriented walls. Within the walled area can be seen five ancient wells, the circular cylinders of which are exactly 35 inches in diameter. Their mouths are in some instances square and in others triangular in shape. The wells are built of very large ancient flat bricks. When I visited Bāseḍīlā in July, 1899, I heard that Bengal and North-Western Railway contractors had carted away bricks from this site for close on three years, and I saw their workmen digging some from the foundations of a monastery, the outer wall of which was of the thickness of two ancient bricks laid side by side, while the dividing wall between each individual cell corresponded to the breadth of one brick. They told me that they had also discovered, and completely destroyed, the ruins of a temple built entirely of beautifully moulded bricks, and this I can readily believe, as I myself saw at least six kinds of moulded bricks with clearly cut designs, which were well worth photographing. Specimens of some of these bricks can be seen built into the walls of a roofless house of one apartment in the village. I noticed lying about specimens of uncarved burnt bricks, which measured (1) 17″ × 10″, (2) 14″ × 9″, (3) 9″ × 10″, but I omitted to keep a record of the thickness of each variety. In the ruins numerous small sun-dried clay bottles and saucers are found, and I obtained a marble mould for the manufacture of ten kinds of women's ear, forehead, and arm ornaments. Occasionally an early Kuṣān copper coin is turned up. Bāseḍīlā must have been a place of great sanctity in ancient times, as there are a very great number of tanks of all sizes on every side, except the north, outside the walled enclosure. The tanks, none of which seem to be lined with bricks, were probably made by pilgrims ages ago. I am told, on what appears to be reliable authority, that Buddhist pilgrims from Arakan in Burma visit the place, but I was not fortunate enough during my three years residence in the Gaŭḍā District to meet with any of

them to learn the reason why they hold this spot sacred, and I did not stay long enough at the time of my visit to Bāseḍīlā to hear if any legends are current in the neighbourhood.

Paltīpur, about 6 miles to the south side of Balrāmpur, which is distant 10½ miles to the south-east from Sāheṭ Māheṭ, has the village named Ratanpur to its north and Kariarpur to its south side. A few years ago some workmen opened here an underground chamber built of large bricks, which on fracture showed husks of paddy, and in consequence the date of the chamber was conjectured to be of the same age as the ruins at Sāheṭ Māheṭ. The chamber contained the skeleton of a very tall man, which crumbled to dust on exposure to the air. The workmen fled in terror, and the chamber was afterwards closed, without, I understand, being destroyed to any great extent. The skeleton was probably that of some holy person. The native gentleman, at that time sub-manager of the Balrāmpur estates, who volunteered me this account, is, I consider, trustworthy with respect to his facts. He presented me with a violin-shaped copper ladle for pouring oil on holy fire, and with a well-carved light-coloured sandstone female head, ornamented with a necklace and ear-rings of the pattern cut on the mould from Bāseḍīlā. These, he said, had been discovered in the Paltīpur ruins.

ART. XX.—*Cup-marks as an Archaic Form of Inscription.* By J. H. RIVETT-CARNAC, C.I.E., F.S.A., late I.C.S., Colonel Volunteers, and Aide-de-Camp to H.M.

MANY years ago, in a paper read before the Asiatic Society of Bengal, attention was drawn by me to the resemblance borne by the 'cup-marks' found in India to the archaic sculpturings of Europe, described by the late Sir James Simpson and other writers on the subject, and certain theories were advanced regarding the possible significance of these markings.

Since then, the enquiry has been advanced by the discovery of these rough sculpturings in many parts of the world in which they had hitherto remained unnoticed. Sketches and reports on these cups and circles will be found scattered throughout the Proceedings of many of the British and Foreign Antiquarian Societies, and the subject is now receiving special attention in Italy and Spain, where these markings are to be found in considerable numbers and in many permutations. Certain evidence from the Chinese classics, recently obtained, appears also to bear on my theories. And the presence of these markings in China, and the traditions relating thereto, have suggested to me that the subject may be considered of sufficient interest for the consideration of the Royal Asiatic Society, and of its members in many parts of the Far East, who may be able to render valuable assistance by noting and reporting on any similar marks which may be found to exist in the localities in which they reside.

It is hardly necessary here to attempt to clear the ground by meeting the objections that may not unnaturally be raised to the importance of these markings by those who are unacquainted with the works of the late Sir James

Simpson, Professor Désor, Dr. Rau, and others. In the present paper it is not proposed to examine these objections, but to confine the remarks as far as possible to what is believed to be new evidence supporting the theory that these markings are, possibly, an archaic form of inscription. It may, however, be noticed that the above writers have shown in some detail that many at least of these cup-marks are neither of recent nor accidental origin. Since the publication of Sir James Simpson's work, nearly fifty years ago, the discovery in many new localities of cups and circles, resembling those figured by him, have helped to confirm the views advanced at the time. And it may fairly be stated that there is now hardly any rocky country in the explored world in which these markings are not to be recognized by those who seek for them. Some of the usual forms of the cup-marks, and the circles which often accompany them, are given in Plate I.

Up to the present, however, little importance has been attached to these cup-marks, and the general verdict seems to be that, even admitting them to be both artificial and ancient, they are at the best but a rough form of ornamentation, possessed of no significance, and consequently of just as little scientific interest.

The theory[1] now to be noticed is that these cup-marks are a very ancient form of 'writing,' and that the accompanying circles are the symbols of the faith of those by whom these inscriptions were made. The word 'writing'

[1] That these markings might be proved to be an archaic form of inscription was, I believe, first suggested many years ago by Canon Greenwell, F.R.S., who also recognized in the circles possible religious symbols. Duke Algernon of Northumberland, by whom many inscribed stones were noticed in the neighbourhood of Alnwick, whilst accepting these views generally, held to the importance of the collection of further evidence, and caused a survey to be made of these markings, the results of which were printed and engraved in the magnificent folio completed after the death of the Duke, and liberally distributed by his successors to the leading Antiquarian Societies. As, unfortunately, this valuable work was issued privately, it is not generally available, and is but little known.

M. Emile Cartailhac, who was much interested in my Indian discoveries, expressed his opinion ("La France préhistorique, d'après les Monuments," Paris, 1889): "Il est donc positif que les pierres à écuelles avaient une signification pour les hommes de l'âge de la pierre et pour leurs descendants ou successeurs immédiats. Leur sens mystérieux était compris dans une grande partie de l'Europe. Après l'âge de bronze elles disparaissent."

is used in its early sense, that of scratching or marking, and it is suggested that the writings were ideographs, used at a period when the material for record was limited to stone, long before the discovery of an alphabetical system and of improved appliances, admitting of the development of writing in its later stages.

Rough as the system was, it was probably all that was possible before the discovery of metal. To those working on stone, with a stone implement, pictographs, or lines, or letters, would have been difficult to fashion, even if the workers had been sufficiently advanced to adopt such systems. The rude stone implement known as a 'celt' would be used, and with it the easiest of all marks would be an indentation pounded and ground out on the rock with the smaller end of the celt, and forming the cup-marks now under notice. Such marks, sometimes large, sometimes small, are to be found in an endless variety of permutations on stones and rocks in almost every country of Europe, in Asia, in Africa, in both North and South America, whilst recently they have been brought to light in Australia also. And it may safely be averred that those already noticed and figured are but a portion of those which exist, and which would be available for comparison if the subject should be considered of sufficient interest to stimulate further enquiry and research.

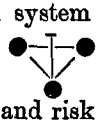
So far, little satisfactory evidence has been adduced that these widely diffused markings are an ancient form of inscription. If they be prehistoric, as supposed, then obviously no historical evidence is available in their support. Before producing what may, it is hoped, be accepted as evidence founded, if not on history, still on tradition, it may be convenient to consider the theory on the basis of probabilities.

It is known that a very early form of recording and conveying ideas was by the means of knotted cords.[1] The

[1] "In the highest antiquity government was carried on successfully by the use of knotted cords—to preserve the memory of things."—*Yh King*, Dr. Legge's translation.

system was ideographic, just as the knot in the pocket handkerchief is ideographic. Three knots in a cord might, by a prearranged code, convey to the recipients that the sender considered the bearer to be trustworthy, or the reverse.[1] The presence on rocks of cup-marks joined by lines, or 'gutters' as they have been termed, suggests that these cups were possibly the reproduction on stone of the ideas recorded on the strings or thongs. As the joining of the cups by lines entailed labour, and the lines on the stone were unnecessary, they may possibly for that reason have been discarded. Without the lines, the cups alone would still remain a satisfactory copy of the knots so arranged on the strings, and with or without the joining lines would convey the same ideas to those by whom the system was understood. (See marks on Fig. A, Plate I, which may be seen both with and without connecting lines.)

A brief notice of the manner in which ideas are conveyed and recorded, even in the present day, by a system of ideographs resembling in some way the above, may be of interest as showing its application in what may be called elementary methods where the alphabetical system or the formation of letters is inconvenient or difficult.

In fine weather at sea messages between ships can be communicated by a variety of methods. But before the invention of the system of wireless telegraphy, communication at a distance or in bad weather was by flags by day, by fixed lamps or flashes by night. The flag system was sometimes alphabetic, but more generally ideographic, certain combinations conveying prearranged ideas. But in calms, when flags were not blown out and revealed, a system of discs was used, and is still to be found in the Board of Trade regulations, which approaches sufficiently near to what is claimed for the cup-mark system of ideographs. Thus three discs hoisted as above  might convey to a mariner, without the difficulty and risk of spelling out a message in a language he

[1] A message according to the Morse telegraphic code can readily be recorded by knots made on a string at long or short intervals.

might not understand, that the signaller required assistance. The system of stationary lamp signals, as distinct from flashes by electric light, may be seen in the Board of Trade regulations, and is little more than a system of illuminated cup-marks. And somewhat similar marks may be recognized in a musical score, whilst Beethoven's rough notes will show that he also eliminated the lines or 'gutters' in rapidly jotting down musical ideas in his pocket-book. The system of raised dots (Plate III) for the use of the blind is but an inverted arrangement of cup-marks. The words can be spelt out, but abbreviations or ideographs are included when well-known words or sentences that recur are used. All that is claimed in the present argument is that if in systems where the use of letters for various reasons is difficult, such simple marks as those indicated are employed even in the present day, it is not improbable that a somewhat similar system, represented by the cups, may have commended itself to man at a very early stage.

The Morse system now adopted for messages by electric telegraph goes still further to support the probability that the cup-marks were a form of ideograph. Some advance has been made in recording messages in printed or in formed letters transmitted by electric telegraph. But the system generally in vogue now is that of Morse, the dot and dash, the short and long mark, which has been adopted in many devices of signalling by flag and by flash in military operations. The permutations of two different marks appear to have suggested themselves at a very early date as a convenient form of cypher or ideograph, long before Bacon's dissertation on the subject. Morse, in having to deal with electric record in an elementary stage, adopted this system. But it is interesting to note that he commenced with permutations of the small and large *circle*. This he subsequently discarded for the short and long *line*, for the reason that, with his delicate instrument, the circle was more difficult to make than the line, and that in making the circle the paper was liable to be torn. The system eventually adopted by him depended thus on the instrument and the

material. But the Morse system, though alphabetical, providing an equivalent for each letter, and admitting of a message being spelt in and spelt out, is also ideographic. In simple messages constantly used, such as "Clear the line," etc., the words are not spelt, but an ideograph, such as four short lines or rapid dashes convey the meaning, and save time. Similarly, in military messages, whether by electric telegraph, flag, or flash, it would hardly be practical to spell out such a message as "The enemy is advancing," or "Prepare for attack." A prearranged ideograph is employed, which, if recorded on the tape, might resemble the cup-mark system, save that the cups have, for the reasons already noticed, been superseded by the lines. And if found easy and convenient to-day, why should not a system based on the same lines, or rather on the same cups, have commended itself at a very early stage, the systems being all what may be called elementary, and not admitting or requiring, for various reasons, of elaborate alphabetical record as now known?

This, at least, is certain, that cups large and small in many varieties of permutation are to be found on stones and rocks all over the world. And cups of the same size are also to be found arranged in lines, which, as in the case of ships' lamps, may be used as a system of ideograph.

Further, the localities in which such groups of cups are found favour the idea that they may have been inscriptions. The Kumaon markings, of which a sketch is annexed (Plate II), and many others, show methodical arrangement which militates against the theory of ornamentation or accidental groupings. The rock on which they are inscribed faces a pass into which local traffic is concentrated. In the present day, if an enterprising dealer desires to advertise his wares, or an important notice has to be posted, the site chosen is a frequented thoroughfare or the neck of the bottle to which traffic converges. In Switzerland, cup-marks have long been found in the valleys which the early tribes used as routes or halting-places. It was long ago suggested by me that the Alpine passes might provide further evidences.

Quite recently the Antiquarian Society of Como has found an endless variety of such markings in what was indicated as the most probable spot, i.e. at the base of one of the oldest and most frequented passes, used from time immemorial by the advancing tribes. Cup-marks are also frequently found on tumuli, and these cannot fail to suggest the intention of identifying the graves of the persons interred. (Plate I.)

So much for the cup-marks. These, as is known, are frequently found in company with circles with a central cup or dot, and with concentric circles. (See A, Plate I.) If it be objected that, admitting the cup to be an easy and early form of mark, the circle is more elaborate and of later date, it is to be noticed that, given the cup as a centre, the circle can be readily made with the help of a celt and a thong or string. The use of such strings would have been suggested at an early stage by the creepers binding up the boughs, and be used for tying the rafters of the necessary shelter or thatch. The brambles and creepers entangling his limbs and retarding his progress through the forest would suggest to man the rope for tying up domestic animals, which, when tethered, would describe circles in their movements; and reproduction of this device on stone would follow. The view advanced is that the circle is the symbol of an ancient faith, which has survived in India until this day. The cup-marks and circle on the stone of a tumulus might indeed represent the ideas of the inscription and the cross of later tombstones. It is not suggested that the cups so inscribed necessarily recorded sentences. They may have been distinguishing marks to recognize a grave of a chieftain, and may have denoted his importance or any special attribute. They may have been his 'cognizance,' just as two circular discs,[1] or cup-marks, on the coat or shield of a man encased and unrecognizable in armour were used for recognition. A somewhat similar method has survived to the present day in the elementary system of

[1] The pawnbroker's well-known sign of three balls is taken from the Lombard shield, which carried three balls, or circles, or cup-marks.

marking portmanteaux with crosses, lines, or circles to be seen on luggage on the railway platforms frequented by tourists.

Many years ago it was suggested by me that these tumuli, similar in construction, in their contents, and in their markings, extending in an almost unbroken chain from the East into Europe, might be useful in tracing the progress of the emigrant tribes. And the view received support from Professors Bertrand, Désor, and others. Since then the subject was taken up by the Government of the United States, by whom my paper and sketches were republished, and the enquiry that followed showed the existence of similar markings on the American Continent. A detailed notice of the subject will be found in Dr. Rau's book, published by the Ethnological Department of the U.S. Government at Washington.

A further link in the chain of evidence relating to these cup-marks has now to be noticed, and is submitted not only as assisting in furnishing a continuous trail between India and Europe on the one side and the American Continent on the other, but as providing what it is hoped may be regarded as evidence in support of the theories advanced as to the significance of the markings. Professor Stephens, of Copenhagen, who was much interested in my first finds of cup-marks near Nagpur, wrote me, as far back as 1870, "it is to India that we must look for an explanation of many antiquarian difficulties." He was, perhaps, not so wide of the mark if the following evidence from the adjoining empire of China is considered to throw light on the question.

Soon after the publication of my paper on the Kumaon rock-markings, in which the resemblance of the cup to the Morse code, the circle to the Mahadeo symbol, was suggested, an article appeared in the *Saturday Review*, written by Professor Douglas, of the Oriental Department of the British Museum, in which these markings and those of a similar type in other parts of the world were noticed. This article is appended as an explanation by an eminent

authority of the position as it presented itself at the time. Writing to me later, Professor Douglas stated: "It is your paper in the Proceedings of the Bengal Asiatic Society which opened our eyes to the probability that similar cup-marks to those found by you formed the foundation of the diagrams upon which 'The Book of Changes,' the oldest book in the Chinese language, is said to have been based." (See Plate III.)

A similar view was communicated to me by the late Professor T. de Lacouperie, whose early death removed a valuable worker in the enquiry thus opened out, not, however, before he had been able to give some support to these theories in his "Beginnings of Writing" (Nutt, 1894).

"The Book of Changes," or *Yh King*, referred to by Professor Douglas, besides being the oldest of the Chinese classics, has been described to be the most impossible of all the great Chinese puzzles, an unsealed book, the meaning of which for generations the greatest scholars have unsuccessfully attempted to explain. It would be rather more than presumptuous for one who, like myself, is utterly ignorant of the Chinese language, to attempt to solve what even Confucius could not satisfactorily accomplish.[1] The interpretation of

[1] Although the interpretation of the diagrams does not bear on the argument, the text has some interest having regard to the information contained, such, for example, as that relating to the 'Troglodytes,' the alien tribe, authors of the cup-marks, whilst the 'wings,' or appendices, explain the cypher and its development. After reading through some of the controversies and explanations regarding the riddle, one cannot but be impressed by the solution indicated by the late Professor de Lacouperie. Most commentators are mystified, and some irritated, by the hopelessness of the text or translation of the diagrams, for in the "Book of Changes" can be found no sustained sense and no continuity of record. But supposing these diagrams to be, as Professor de Lacouperie suggests, the 'syllabaries' of an ancient people, with whom the art of record was still in its infancy, the objection seems to disappear. They were, as I understand it, examples of the permutations that could be made and the ideas recorded with the assistance of the cypher and long and short stroke. The diagrams resembled the printed alphabets, accompanied by words and sentences, hung up in schools to teach young scholars their letters and the manner of forming words and sentences therefrom, or are like the old needlework samplers, of which collections are now to be seen as handed down from some generations ago. These show the letters as they are to be worked, and occasionally contain some information, such as "Anne is a great Queen," "Life is short," "Blenheim was fought in 1704." These were useful in their way, but it would be hopeless to expect

the text in no way, however, concerns the bearing of the work on the present question.

As affecting the views herein noticed, the material point is that the *Yh King* is based on a system of lineal diagrams, of which a few specimens are annexed (Plate III). These diagrams, engraved on tablets of stone, were, it is said, handed down from time immemorial from one Chinese dynasty to the other. The diagrams themselves, portions of the interpreted text, and the traditions connected with the work, are all of importance to the enquiry, and have now to be briefly noticed as evidence bearing upon the views advanced.

The diagrams (Plate III), it will be noticed, consist of short and long lines, or permutations of these, and are arranged in rows, admitting, by an increase in the number of the rows, of endless combinations and permutations. The short and long line is nothing but the dot and dash of the Morse code of signalling, now so generally in use. The diagrams of the *Yh King* are admittedly ideographs to be 'divined' or interpreted by those possessing the knowledge or the key, and the system appears to have existed in China for long years as the only method of record, the knowledge being confined to experts or those 'initiated' by having

from such a collection any continuous record of the history of the day such as a book might provide.

The arrangement of the cypher, too, supports the idea above. It commences with the form six long lines is followed by six pairs of short lines just as *A* would be followed by *B* in a sampler, or in the arrangement of letters in a dictionary. Although it is not impossible to form some words following the sequence of letters in an alphabet, a record of any value would mean the mixing up of the letters, and little sustained record would be possible if one was tied to alphabetical sequence. Thus it seems not impossible that, whilst using the diagrams as a means of instruction, as showing how the permutations could be utilized, the designer at the same time availed himself of the system to record matters of some interest, just indeed as was done in the work-samplers of our forefathers. If, on the other hand, the diagrams were a record 'written' in the cypher of the day, the long and short marks would be found mixed up in various permutations, just as the letters in a page of print, and would not proceed on the system of first all long strokes, then all short strokes, and so on, as indicated above.

been taught the system. It is related that in 1150 B.C. the Duke of Chew, being then imprisoned for a political offence, 'divined' or worked out the meaning of these diagrams, with, presumably, some knowledge or with the key of the system. He had to deal with a much more difficult cypher system than that mastered by Dumas' Abbé during his imprisonment, or Poe's cypher of the Golden Beetle, for in the case of the *Yh King* the system is ideographic, whilst in the others it is alphabetical and assisted by the recurrence of certain letters.

But further, this Morse-like lineal cypher is, according to tradition, founded on a still older system, that of the "Map of the Ho River" (Plate III), the resemblance of which to the Kumaon cup-markings attracted the attention of Professor Douglas.

Long accepted Chinese tradition has it that the discovery of writing is to be credited to the Emperor Fuh-he (2852–2737 B.C.). A rough system had already been worked out by certain so-called Troglodytes. This Fuh-he saw, and, recognizing its importance, adopted and developed. On the banks of the Ho River, on the north frontier of the country, the Emperor, says the legend, found an alien nomad people, who inscribed on the rocks, as a form of record, certain round star-like marks, the "Map of the Ho River." Fuh-he carried away with him the secret of this system by copying or scratching it on a tortoise-shell, and this shell, long since lost, is said to have been preserved for centuries as a sacred relic in the treasure-house of successive Chinese monarchs. At a time when better material was unknown, the idea of the system of the markings being copied from the marks on the rocks and scratched on a ready-to-hand tortoise-shell, with the help of some rough implement, seems probable enough. If this legend be accepted, then it seems to explain the markings found on rocks in China and in India to the present day. And it is hardly too much to suppose that this alien tribe[1] and its offshoots, in their wanderings, may

[1] Some glimpse of these Troglodytes will be found in Professor Terrien de Lacouperie's translation of the *Yh King*, suggesting that they, though a wild

have carried the system in course of time to many widely dispersed countries on both hemispheres.

The *Yh King* and its 'wings,' or appendices, help to explain what this system was. It was based on the permutations of two round marks—● O—one dark, the other light. Looking to the difficulty of such representations on the rock, it seems more probable that the system may have been by holes of two different sizes, as still extant. The "Map" handed down is of comparatively late origin, the tortoise-shell having been lost, and appears to be founded on some general idea or remembrance of the system. But that the cups were probably small and large is evidenced by the improved system as developed by Fuh-he or his successors from the two classes of cup-marks. For the one ●, was substituted a short or small line ▬, for the other O, a longer or larger line ▬▬▬, not a light and dark one. The change probably followed the improvement in the material available. Working on stone, with a stone, cup-marks came naturally and easily enough. But on wood or stone, with a stone implement, lines could be more readily made than circles. And as Fuh-he changed from one to the other, so later did Morse, in working out his system of electric record, discard, for somewhat similar reasons, the circle and adopt the line in its stead. A reference to the diagrams of the *Yh King* will show that the cypher might be worked, not only by the permutations of the two different marks, whether circular or lineal, but also by the positions of the marks as arranged in rows, circles, etc. Says the *Yh King*: "The necessary changes are gone through, till they form the figures pertaining to heaven and earth; their numbers are exactly determined, and the emblems of all things under the sky are fixed." Elementary as the system was, it was possibly sufficient for the modest requirements of the time. The things in heaven and upon earth known to their philosophy were comparatively few, and the lexicographer

people, had some knowledge; thus, "The Troglodytes which are in the wild places; many cross the river; many are sages. The Grand Teacher can understand them, etc."

of the day would have had ready to hand quite enough of simple permutations with which to record his then limited vocabularies. Some glimpse of this simple method can be obtained from the appendices of the *Yh King*, and the subject is included here as indicating the possibilities of record by this crude system of cup-marks or lines. Thus, according to the row on which the dark or light, or small or large circle, or their equivalents, the short or long line, dot or dash, were placed, the object could be recorded and recognized. As the heavens are above the earth, the heavenly objects would be on the highest row, the large, light, or strong circle representing in its position the sun, the lesser, dark, or weaker the moon; and so with the equivalents, the long and short line. Below, on the earth, so to speak, the strong or large mark ▬▬ was the man, the weaker or lesser ▬ the woman. The signs O ●, or ▬▬ ▬, the male leading or predominating, represented, it is explained, the eldest son; ● O, or ▬ ▬▬, the female emblem governing, meant the eldest daughter. Then, according to their place on a row, followed fire and water, heat and cold, strength and weakness, similarly indicated, and so on in endless variety, in systematic combinations intelligible to the initiated.

And this brings me to a further point connected with these markings, to the cup and circle, the ⊙ so constantly found accompanying the cup-marks (see Plate I), and which has been regarded by me as the symbol of the ancient faith of the cup-mark makers placed by the side of their inscriptions. The name of the work, the *Yh King*, the "Book of Changes," is thus explained, "Production and reproduction is what is called (the process of) change."[1] And it is related in the work that the original idea of the markings, the O and the ●, was suggested by the study of the heavenly bodies, the sun and the moon, the father and mother, and their countless progeny, the stars. The whole process of the

[1] This and other quotations are taken from the translation of the *Yh King* by Dr. Legge.

working out of the cup-mark cypher system is described as based on what the late Sir J. F. Davis termed the "sexual system of the universe." "Thus heaven," he says, "the sun, the day, etc., are considered of the male gender; earth, the moon, night, etc., of the female. This notion pervades every department of knowledge in China."[1] Given the O alone, there can be, says the *Yh King*, no 'change,' or no 'reproduction.' And so with the ● alone. But bring these two together and infinite change or reproduction is ensured. With these nature brings forth her increase, with these a complete system of record is possible. Thus the cup-mark system on which the diagrams were founded, and of which the *Yh King* is the record, is made to spring from the "sexual system of the universe." And the title of the "Book of Changes," "production and reproduction, the process of change," is represented by an ideograph (of which, as is known, the Chinese character is mainly composed)—thus . In this will be recognized the symbol which accompanies the infinite progeny of cup-marks on all rocks, the large and small, the light and dark circle in conjunction, the father and mother of all things.[2] To the present day in India and elsewhere, this is the symbol of the sexual system (Plate II), of a widespread faith founded on the mystery of life, which if in some quarters now debased and overlaid with much that is objectionable, may also be recognized and venerated in its original natural, high, and sacred significance.

The subject is ordinarily considered a delicate, or rather an indelicate, one to discuss, and a somewhat unreasoning objection is sometimes raised to the consideration of what was admittedly an ancient and widespread faith, and which need not necessarily be associated with aught that is impure or objectionable. In this view it may be permissible to notice, in connection with the argument, that the ancient stones and rocks inscribed with the cups and circles are in

[1] "China and the Chinese," by the late Sir J. F. Davis, Bart., K.C.B., F.R.S. (my maternal uncle).

[2] The two marks to the left bear a resemblance to the snake often found with the circle.

many parts of Europe even still associated with ideas bearing a relation to this primitive cult. The monoliths, as in the case of that figured in A, Plate I, not only bear these marks, but are themselves in the shape of the symbol of this worship, indicating nothing necessarily obscene, but reproduction, the great mystery of life in the human, animal, and vegetable worlds, the most natural subject of awe for man in whatsoever his stage of development. These points are brought out by Messrs. Piette and Sacasse in their exhaustive enquiry into the traditions and customs connected with monoliths and these markings in parts of France, whilst the subject has more recently been noticed by Mr. Lang in connection with certain Scottish cup-marks. And in Switzerland such rocks are still known as the 'babies' stone,' and where they remain undestroyed the ordinary idea of the stork as the purveyor of the new brother or sister will be accepted by no self-respecting child of the locality. All new-born babes are believed to be brought from the mysterious stone of the vicinity. If it be advanced that no such idea could survive the ages between the then and the now, it is to be remembered that such superstitions are handed down in a manner which, if marvellous, is still true. That they are long-lived and die hard, notwithstanding the active and long-sustained assaults of the local clergy, is shown by the enquiries of MM. Piette and Sacasse. The evidence of the survival of an original emotional idea in connection with religion is overwhelming, and need hardly be quoted further here in support of the argument relating to these widely distributed symbols.

It appears necessary, lest it should be thought that the point has been overlooked, to refer briefly here to the important position held by standing stones in the history of all early religions, to the references to the subject in the Bible, to their place in tradition, and to their veneration in parts of the world, even in the present day, as representing the mystery of life and reproduction. It can also readily be understood how, in days before temples or churches or parliament-houses could be constructed, a mysteriously

placed erratic block or great stone would be a well-marked point of assembly for religious or secular purposes, and how such a stone would long retain a mysterious and sacred character. And such a block would naturally suggest itself as available for a record, or as a 'guide-post' to peoples in their wanderings, and would remain long preserved, thanks to its sacred character. The Coronation Stone in Westminster Abbey, with the many traditions, Biblical and other, associated with it, may be instanced as an example remaining to us in London to the present day of the interest still attaching to such stones.

It will be readily understood that one who, like myself, can claim no knowledge of the Chinese language must labour under special disadvantages in venturing to bring forward and examine so difficult a witness as the *Yh King* in support of a theory. But to what extent my views receive the sympathy of Professor Douglas, the highest authority on the Chinese classics, will be seen not only from his article in the *Saturday Review* above noticed, but also from the following more recent letter, in which these theories are to some extent supported. Writing to me on the 29th June, 1901, Professor Douglas said:—

"I have read through your letter carefully, and have refreshed my memory on the points you make.

"As I understand your view it is this: that the Emperor Fu-hi discovered on the banks of the Ho and Lo certain round markings (in the words of the Appendix to the Yi-King, 'The Ho gave forth the map (or plan, or scheme), and the Lo gave forth the book (or defined characters) which the sages (or sage) took as their pattern'); that the resemblance of these markings to the cup-marks suggested the probability that they were identical with them, and your discovery in the Kumaon Valley helped to confirm that theory; that according to the native authorities the Kwa, or diagrams, invented by Fu-hi were designed from these markings, and that these stand at the heads of the chapters of the Yi-King as indicative of their contents; and that you point out that the combination of the long and

short lines of the Kwa are similar to the Morse system of telegraphic signalling. And also that by very general assent cup-marks have reference to production and reproduction in what is called the process of change.

"In all this I cordially agree, and if only we could get further and show what the Kwa mean, the theory would be perfect. At present the meanings attached to the lines of the Kwa by Chinese commentators are simply childish, and if, by means of the cup-marks, we could read between the lines, it would be one of the greatest literary discoveries of the age."

Although one may be permitted to entertain some faint hope of the 'divination,' as the Chinese called it, of the meaning of the cup-marks being within the range of future possibility, especially if cups can be found together with later marks as indicated in the American specimen B, Plate I, the successful interpretation of the cypher hardly affects this the preliminary stage of the enquiry. We must proceed step by step, and an important step will have been gained if the preceding statements help to ensure recognition for the cup-marks as a form of inscription, and promotes them from the very low position hitherto occupied by them in the field of antiquarian research. One must try to walk before one attempts to run, and the answer to the objection sometimes raised to these theories, that they are useless unless the supposed ideographs can be interpreted, is, that if interest can be aroused in the subject, further advance may be expected when the vast variety of such markings to be found in many parts of the world can be collated and compared. And some further aid may be expected from the early Chinese writings, if scholars can be induced to take up the subject seriously.

That many further evidences, hitherto unnoticed, may yet remain to us, is indicated by the recent discovery in the neighbourhood of Como and at the southern base of one of the Alpine passes of masses of such markings, which have now been figured and described by Dr. Magni, of the Royal Italian Antiquarian Department, and show many varieties

of permutation and arrangement. That they exist in China, on other rocks besides those of the Ho River tradition, is shown by their discovery, as communicated to me by Professor Douglas, on a sea-cliff on the promontory of Shartung, on a hill near Soochow, and in a cave-dwelling in the province of Canton, and elsewhere in that empire. The Bishop of Northern China, the Right Rev. Dr. Scott, has been good enough to interest himself in the subject, and as the country is further opened out to European travellers, it is hoped that the reverend missionaries and others, with their attention directed to the subject, may yet find these markings in other parts of China. They may even be able to visit the Ho River, and find and photograph the rock inscription said to have been there, so that the so-called "Map of the Ho River" may still remain to us as evidence to confirm the tradition of Fuh-he and his discovery of nearly five thousand years ago.

Last year, when passing the winter at Madrid, I did not fail to enquire concerning cup-marks, hoping that mountainous Spain might contribute to the enquiry. The answer was that such markings were unknown there;[1] and a search through the antiquarian publications at my disposal confirmed this statement. But in the Museum at Madrid are to be seen five fine granite blocks from Avila, roughly hewn in the shape of the Iberian boar, not unlike the Hindu boar *avatar*, and long viewed as mysterious termini and places of assembly throughout that country-side. These huge blocks could hardly have been placed as landmarks, but being found established *in sitû* were probably taken as points from which to divide off the boundaries, just as on a larger scale a mountain or a range of hills are adopted as natural points for the division between districts or countries. All five of these blocks were found to be pitted with circular holes — if not cup-marks, then resembling cup-marks. These blocks, which had remained

[1] I had the advantage of discussing the subject at a meeting of the Royal Academy of Spain, and the Academy subsequently did me the honour of electing me a corresponding member in the Historical branch. Since then several cup-mark inscriptions have been brought to light, and noticed in the Proceedings of the Spanish Royal Academy.

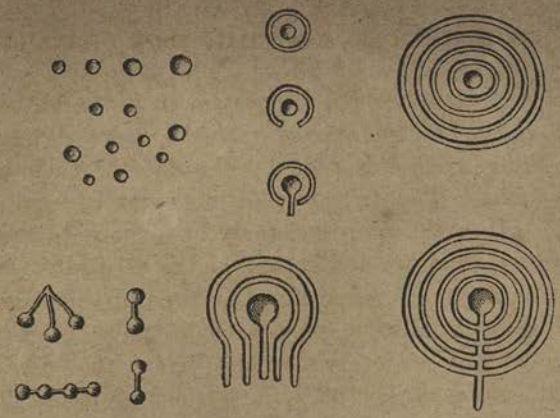
from time untold in the open, had been so indented, it was seriously stated, by rain-dripping, and all five blocks in a somewhat similar and regular manner! As to whether the cups were first made on the boulders, and these subsequently roughly hewn into the shape of the boar, or whether the shaping came first, the holes afterwards, there was nothing to show either one way or the other. But there is no improbability that early immigrants, finding them *in sitû*, may have used these erratic blocks for inscriptions, and that later tribes may have used these prominent features in the landscape for their purposes. A monolith bearing both a Roman inscription and cup-marks has been instanced to me as a proof of the late character of the cups, as evidenced by the Roman inscription by the inside. There is no proof, it is true, that the cups were made at an early date, the Roman inscription placed later. Nor is there any proof the other way. Still, it is well known that the later comer utilizes the material left by his predecessor. In India may be seen remains undoubtedly prehistoric, on which later Hindu deities have been sculptured, whilst these again may be seen defaced or placed inside-out by the Muhammedan conquerors in the later superimposed mosque.

A formidable argument against the theory that these cup-markings are the relics of tribes, such as those of the Ho River, who carried the system with them on their migrations to far-off parts of the world, is available in the view advanced by me that this is an easy and natural form of record, which would suggest itself to primitive man. If so, then it is arguable that the idea may have occurred simultaneously to tribes far separated, and having no communication with one another. In an early stage all elementary ideas come naturally and independently. The necessary thatch for protection from rain or heat, the bed or seat raised off the damp earth, and the stone as the readiest implement to hand, are, in their earliest forms, the same everywhere. And it has further been noticed by an able and valued critic that, admitting that Fuh-he's tribes started from the Ho River centuries ago with this cypher germ, and eventually found

their way into Europe, the system in the meantime would, with the help of improved material, have developed into something much less rude by the date of their arrival in these isles. The tribe would not march from point to point. It would camp and tarry in favourable spots, would exhaust the pasture, and expand and force itself way onwards by slow degrees. Admitting the force of this argument, it is still doubtful how long such a tribe might remain dependent on stone implements before the discovery of metal improved not only the system of record but other not less important methods. And it is not impossible that one tribe may have passed the system on to another as time went on.

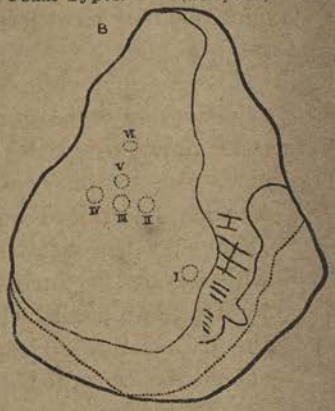
There are doubtless many other and more formidable objections to be advanced against these theories, but before condemning this not very clear or comprehensive statement in respect to the cup-marks, I would ask that the works of such recognized authorities as Simpson, Bertrand, and Désor may be consulted, which contain a mass of evidence which cannot be included in the present paper. The report by Dr. Rau, published by the Ethnological Department of the United States Government in 1881, already mentioned, should be consulted. This report advanced the enquiry a step further than Simpson's work. Since Rau wrote, however, some further progress has been made, and it would be well if the notices and sketches of these sculpturings, scattered through the publications of various antiquarian societies at home and abroad, could be collected and compared.

Enough, it is hoped, has been said to indicate the desirability of preserving all such rock sculpturings, and of encouraging further search, enquiry, observation, and record. And it seems specially desirable to urge the importance of noting all inscribed stones, and of saving them from the destruction to which they are often condemned, under the belief that they and their markings are of no significance or interest. These, alas! are rapidly disappearing before the march of civilization. In Switzerland, since Professor Ferdinand Keller's day, many have been destroyed. As it

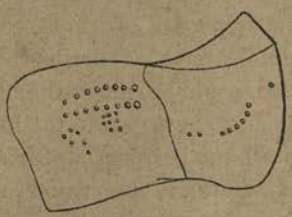


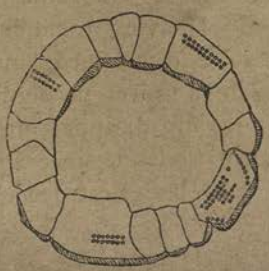
Cup Marks and Circles: Usual Types. (Simpson)

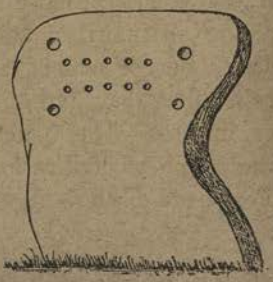
Cup Marks and Circles: Obelisk, Argyleshire.



Cup Marks on Stone, U.S.A.,







Cup Marks on Tumuli, Nagpur, India.

is there, so it is elsewhere; and that these rocks should be removed is natural enough. In Switzerland, erratic blocks were carried down centuries ago by the glaciers into the valleys, and long remained there, solitary, imposing, and mysterious. The earlier immigrants chose the neighbourhood of the rivers for settlements, and there the blocks presented themselves ready to hand, and offered themselves for inscription and record. Weather-worn by succeeding centuries, the markings became indistinct, and, save in certain lights, are now with difficulty recognizable, even by those acquainted with their interest. To most people these shallow depressions, even when seen, appeared to be of no significance. When later roads and railways followed the line of the valleys, the stones were not only in the way of extending agriculture, but provided excellent material for houses or culverts, ballast or bridges; and so very many were broken up. Quite recently I saw, not very far from here, a 'child's stone,' half destroyed by weather and dynamite. Since my visit it has most probably been entirely demolished, and what might have been evidence for our purpose is now lost to us. In remote spots, in what were fastnesses, where the early comers took refuge, the inscribed stones are not so much of an encumbrance, and are tolerated, and often regarded with reverence and awe, so that they are still preserved to us, and furnish some material for observation and enquiry, as the traces and methods of an almost unknown people.

Schloss Rothberg,
Canton Vaud, Switzerland.

APPENDIX.

By Professor Douglas.

[*From the* Saturday Review, *November 24th*, 1883.]

Ignorant people have this distinct advantage over scientific observers, that they are readily able to arrive at conclusions which are perfectly satisfactory to themselves on subjects

which have been the battlefields of scholars for centuries. Persons who believe in Pixies and fortune-telling have no hesitation in explaining, for example, the existence of mammoth remains in Western Europe as being traces of Noah's Flood; nor do they find any difficulty in accounting for the megalithic monuments which, to the mystification of archæologists, lie scattered over every quarter of the globe. These huge relics are to them but 'giants' beds,' 'Devil's tables,' 'old wives' lifts,' 'hags' couches,' or 'Devil's arrows,' and they leave to others the task of inquiring into the vexed question of their origin and of explaining their universality and meaning. These are points of great interest; but, when we pass from the stones themselves to the inscriptions which they bear, curiosity is still further excited. Any untutored savages might have reared up the stones; but none but a people possessing some sort of culture would have left their records on the hard sides of granite and limestone rocks. Some of these records vary in character with the districts in which they are found, as, for instance, the Ogham writing in Ireland; but there is one form of inscription, and that the simplest, which is almost as ubiquitous as the monuments themselves. In Europe, Asia, Africa, and America, in almost every country and under every clime, there are found on these ancient remains shallow, round, cup-like depressions, sometimes in rows, sometimes singly, sometimes surrounded by a ring or rings, but most frequently quite plain. Markings of the kind are found on Dartmoor and elsewhere, and are beyond question due to the action of atmospheric forces. But these may, as a rule, be distinguished from the artificial marks by the absence of certain characteristic surroundings which generally accompany those which, in the opinion of many, have been formed by the hand of man. Whatever may have been their motive, the cup-markers showed a decided liking for arranging their sculpturings in regularly spaced rows; not unfrequently, also, they surrounded them with one or more clearly cut rings; sometimes, again, they associated them with concentric circles or spirals, and occasionally they

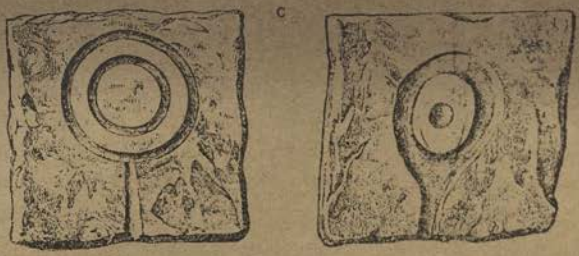
unconsciously proclaimed their artificial origin by carving them in spots beyond the reach of atmospheric influences, such as the interiors of stone cists or of dwellings. But if there is thus a sufficient distinction between those which are natural and those which are artificial, it by no means follows that there may not have been some distant connection between the two, and that the depressions worn by wind and rain may not have suggested the idea of cup-markings to those who first sculptured them.

It has only been of comparatively late years that these marks have attracted particular notice, but when once the attention of archæologists was drawn to them, their constant occurrence under every change of longitude and climate became apparent. The British Isles are peculiarly rich in these markings. In Banffshire, Inverness-shire, Perthshire, Dumfriesshire, and from Lancashire, Cumberland, and the Isle of Man, to Kit's Coty House in Kent and the Channel Islands, they are repeatedly found. In America, France, Algeria, Circassia, Switzerland, and Palestine they have of late years been also recognized, and in India some particularly interesting specimens have been brought to light by Mr. Rivett-Carnac in the Kumáun Valley.[1] In the neighbourhood of a temple, on a rock overhanging the stream, Mr. Rivett-Carnac tells us he noticed marks which, on being brushed clean of the dust and dirt which covered them, proved to be a number of cup-marks, some arranged in rows of odd and even numbers, others in varying shapes and in numerous "combinations and permutations." This is as far east as they have hitherto been discovered by modern archæologists. But the description given of them in Mr. Rivett-Carnac's paper, and the diagrams which illustrate it, suggested to M. Terrien de la Couperie the idea that the 'River Drawings' discovered by the Chinese Emperor Fuh-he (B.C. 2852–2737) on the banks of the Ho, and upon which he is said to have founded the diagrams of the Book of Changes, were similar marks. A comparison

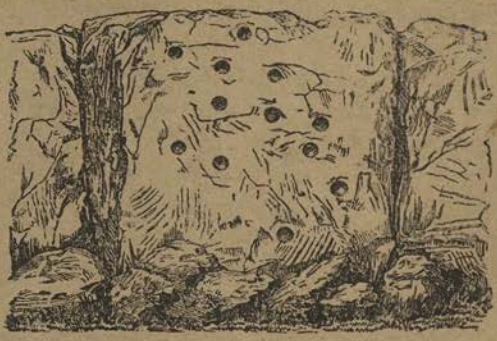
[1] "Ancient Sculpturings on Rocks in India," J. H. Rivett-Carnac, C.I.E., F.S.A., Asiatic Society of Bengal, 1887.

between these, as they have been handed down by tradition, and those described by Mr. Rivett-Carnac, confirms this surmise.

The Chinese legend says that on the occasion of Fuh-he's visit to the banks of the Ho "in the 'grass-springing' month, during the days when the rain descended, [the men of] the Lung-ma [tribe] brought drawings," and presented them to him. These drawings, we are told, consisted of "round, starlike" marks arranged in rows; and that when forming from them his famous eight diagrams, he represented the rows consisting of odd numbers by straight unbroken lines, and those of even numbers by divided lines. As in all ancient legends, the story varies in the pages of different authors. Sometimes it is Hwang-te (B.C. 2697–2597), who, after having fasted for seven days, is presented on the banks of the Sui-kwei river with drawings consisting of "plain marks, vanda leaves, and red writings." At other times it is Yaou (B.C. 2356–2255), who builds an altar at the junction of the Ho and Lo, and who has there laid before him "a cuirass" bearing inscriptions. But whether it be Fuh-he, Hwang-te, or Yaou, the marks are always described as having been brought to their notice on the banks of rivers, and generally in connection with altars or some sacred spots. Not only thus do the shape of the markings and form of the inscriptions agree with those observed by Mr. Rivett-Carnac, but the localities in which they occur are precisely similar. In the Kumáun Valley and elsewhere in India the marks are invariably found in the neighbourhood of temples, of hill-side altars, or of burial-grounds. Those particularly described by Mr. Rivett-Carnac occur on a shelving rock overhanging a stream near a temple or Mahádeo. In the small space of fourteen feet by twelve feet there are no fewer than two hundred of these marks arranged in lines and in every possible combination. Among them also are examples of every known variety of the sculpturings. There are cup-marks pure and simple, then again cup-marks surrounded by a ring or rings, and yet again others surrounded by a ring ending in a groove forming together



Cup Marks: Mahadeo Marks, India, the religious symbol of the present day.



Cup Marks on Tumulus, Clava, Inverness-shire. (Simpson)

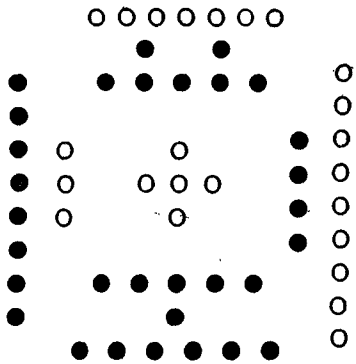
Cup Marks on Cliff, Kumaon, India.

PLATE III.

SO-CALLED "MAP OF THE HO RIVER."

(LEGGE'S "YH KING.")

(Compare with Kumaon Rock Inscription, Plate II.)

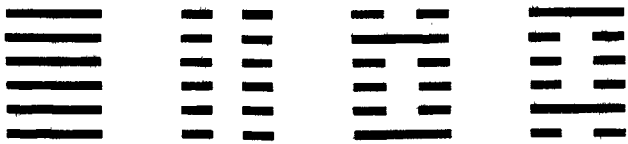


The original, on a tortoise-shell, having been lost, the above is said to have been reconstructed, centuries afterwards, from the general idea then retained.

LINEAL SYSTEM FROM LEGGE'S "YH KING."

FUH-HE'S TRIAGRAMS.

LATER DEVELOPMENT, HEXAGRAMS OF THE "YH KING."



and so on.

MORSE SYSTEM OF TELEGRAPHIC RECORD.

BRAILLE'S SYSTEM FOR THE BLIND BY RAISED MARKS.

the shape of a jew's harp. When questioned as to the origin of these sculpturings, the natives declared their belief that they were the work of either the giants of old or of herdsmen, while others attributed them to the Pándüs, an ancient people who, like the Picts in Scotland and P'anku in China, are supposed to have been the architects of every ancient monument in India which is without a recognized history. Mr. Rivett-Carnac throws out a suggestion that they may be the writings of a primitive race, and points out that the combinations in which they occur are sufficiently numerous to answer the requirements of writing.

In Palestine, and the country beyond Jordan, some of the marks found are so large that it has been supposed that they may have been used as small presses of wine, or as mortars for pounding the gleanings of wheat. But there is an objection to these theories, as accounting for the marks generally, which is fatal to them. To serve these purposes, the rocks on which the marks occur should be in a horizontal position, whereas in a majority of cases all over the world the 'cups' are found either on shelving rocks or on the sides of perpendicular stones. This renders worthless also the ideas which have at different times been put forward, that they may have been used for some sort of gambling game, or as sundials. A Swiss archæologist, who has lately devoted himself to the question, believes that he has recognized in the sculpturings under his observation maps of the surrounding districts, the 'cups' indicating the mountain peaks. In the same way others have thought that similar markings may have been intended as maps or plans pointing out the direction and character of old circular camps and cities in their neighbourhood. But if any such resemblances have been discovered, they can hardly be other than fortuitous, since it is difficult to understand how rows of cup-marks, arranged at regular intervals and in large numbers, could have served as representatives either of the natural features of a country or of camps and cities. But a closer resemblance may be found in them as maps, if we suppose that they were intended to represent things in the

heavens rather than on earth. The round cup-like marks are reasonably suggestive of the sun, moon, and stars, and if only an occasional figure could be found representing a constellation, some colour might be held to be given to the idea; but unfortunately this is not the case. Nevertheless, the shape of the marks has led many to believe that they are relics of the ancient sun-worship of Phœnicia, and that their existence in Europe is due to the desire of the Phœnician colonists to convert our forefathers to their faith. But there are many reasons for regarding this theory, though supported by the authority of Professor Nilsson, as untenable. The observations of late years have brought to light cup-marks and megalithic circles in parts of Europe on which a Phœnician foot never trod; and it is a curious circumstance that in those portions of the British Isles most frequented by these indefatigable traders there are fewer traces of these monuments than in the northern and inland districts, which were comparatively inaccessible to them. We know also that the early Phœnician travellers belonged to the bronze age, and we should therefore expect to find bronze implements in the tombs marked by cup sculpturings if these were carved either by the Phœnicians or their disciples. But, as a matter of fact, the only implements found are of wood, horn, and polished stone.

But there is yet another reason for supposing that the cup-carvers belonged to a period far anterior to the arrival of the Phœnicians in Britain, and that is that the markings have never been found in connection with any shape or form of letter-writing. This one fact, in the face of the acknowledged tendency of people of every age and clime to inscribe characters and letters, when they possess a knowledge of any, on stones and rocks, is enough to prove that these rock-carvers were ignorant of the use of letters. Thus people who accept the theory that the marks are, at any rate in some cases, artificial, are carried far back in the world's history, possibly to a time when the dolichocephalic people, whose remains are found interred in long barrows surrounded by stone implements, were the occupiers of the British Isles.

But whoever these carvers were, and whenever they lived, it is beyond question that for considerable periods they must have inhabited almost every known country in the world, "from China to Peru." And it is the difficulty of fixing the age in which they flourished which gives to the identification of the marks shown to Fuh-he its special interest. Here we have a date which enables us to trace back the existence of similar marks to the twenty-ninth century before Christ or thereabouts. This, in conjunction with the general history of the sculpturings, still more completely disposes of the theories that they owe their origin to the sun-worshipping Phœnician or to people of later times. As to their meaning, it will be seen from what has been said that no satisfactory explanation of it has been offered; and the Chinese legend, therefore, which states that an old man told the Emperor Yaou (B.C. 2356–2255) that they were "records of the years of the Emperors" may fairly claim an equal hearing with the rest. It is further curious to observe that, while mention is made in the Chinese record of representations of vanda leaves having been found in conjunction with the marks, Mr. Fergusson points out that a palm-leaf or fern occurs conjoined with cup-marks at New Grange in Ireland; though how, he remarks, "a knowledge of an Eastern plant reached New Grange is by no means clear."

ART. XXI.—*Some Problems of Ancient Indian History.* By A. F. RUDOLF HOERNLE, Ph.D., C.I.E.

IT has long been a puzzle to me that no coins of the two great emperors Vikramāditya and Harsha Vardhana should have survived, when we have, in comparatively large numbers, coins of most minor kings before and after them. I believe, however, that coins of these two emperors do exist, though they have not been recognized hitherto. My attention was drawn to them recently, while writing a sketch of the ancient history of India.

The late Sir Alexander Cunningham in his *Coins of Mediæval India* gives three plates of Kashmir coins. Two of these, plates iv and v, contain those of the strictly native Kashmir kingdom, beginning with Avanti Varman. All these latter coins, from beginning to end, exhibit mere varieties of precisely the same type: obverse, standing figure of king; reverse, sitting figure of goddess. But there is one striking exception. The three coins forming the third line in plate v present an entirely different type. The type, indeed, is so different that one wonders how they ever got into the series of Kashmir coins. Strictly speaking, the three coins show two types, though both entirely different from the prevailing Kashmirian one. No. 21, in plate v, has on the obverse a horseman, and on the reverse a sitting goddess, while Nos. 22 and 23 show on the obverse the king's name in large letters, and on the reverse the figure of the South Indian elephant.

Another point may also be noted, which, though not decisive in itself, tends to emphasize the difference. All true Kashmir coins, in plates iv and v, are of copper. The

only exception are these three coins, which are either of gold (Nos. 21, 22) or of silver (No. 23).

I will first dispose of Nos. 22 and 23, of which the former is of gold, the latter of silver, and both of which, I believe, are unique. They are the issues of a king *Śrī Harṣa Deva*, whose name fills the whole obverse side of the coin. The reverse is occupied by the characteristic elephant of the coins of the South Indian Kangudeça. Cunningham ascribes the coins to Harsha Deva of Kashmir, who reigned from 1089 to 1101 A.D., and he is followed therein by Mr. Rapson in his *Indian Coins*, §§ 112 and 125 (1). The only ground for this attribution appears to be a passage in the *Rāja Taraṅgiṇī* (vii, 926), which used to be wrongly translated as stating that Harsha "introduced coins like those current in Karṇāṭa" (J. C. Dutt's translation, 1879). The passage really only says that "as (Harsha) was fond, in his amusements, of the Dekhan fashion, he introduced a *ṭaṅka* copied from that of the Karṇāṭa (country)." As Dr. Stein (Transl., vol. i, p. 340) has rightly pointed out, *ṭaṅka* here does not mean 'a coin' but a 'die' or 'stamp.' The whole context of eleven verses (921–931) speaks of fashions of personal dress and adornment; and the particular passage above quoted clearly refers to a certain Karṇāṭa fashion of stamping, probably clothes, or perhaps jewels. The word *ṭaṅka* simply means a 'die,' which may be of any kind or for any use. In the verse in question the context negatives the idea that Kalhana was speaking of a 'coin-die.' In a subsequent verse (vii, 950), and in a different connection, Kalhana does, indeed, speak of gold and silver coins (*dinnāra*) of Harsha. But apart from other improbabilities of that statement which have been already pointed out by Dr. Stein (Transl., vol. ii, p. 317, also footnote on p. 342 of vol. i), the point to be noted is that Harsha's abundant copper coins are of the common Kashmir type (see plate v, No. 24), and if his gold and silver coins had been imitated from those of South India, this subsequent verse (vii, 950) would have been the place for Kalhana to record the fact, but not when he was speaking about fashions of personal adornment.

As he has not done so, it must be concluded that Harsha's gold and silver coins (if there were any[1]) were of the same type as his copper coins. To me it appears far more probable that both Nos. 22 and 23 are issues of Harsha Deva of Malwa, who reigned from about 950 to 974 A.D. About him the Udepur Praśasti says (*Epigraphia Indica*, vol. i, p. 225) that "he took in battle the wealth of king Koṭṭiga," the Rāshṭrakūṭa king of Malkheḍ (Mānyakheṭa). His Southern Indian conquest was confirmed by his son Vākpati II, who, according to the same Praśasti, subdued the Karṇāṭas, Keraḷas, and Colas (*ibid.*, p. 227). Harsha's conquest of Malkheḍ is corroborated by Dhanapāla in his Pāiyalacchī (*ibid.*, p. 226). There can be no doubt, then, that Kangudeça, for a time, was in the power of Harsha of Malwa; and it cannot surprise to find that he struck coins with the South Indian emblem of the elephant to commemorate his conquest. The practice of striking imitative coins to mark a conquest is not at all uncommon, while the adoption of a new coinage (as the Kashmir theory assumes) from mere "love of amusement" in imitation of that of a distant and quite unrelated country, would be an extraordinary occurrence, and one which, so far as I know, is otherwise quite unheard of.

I will now turn to the other coin, No. 21 of plate v. It is a gold coin, and, I believe, also unique. Unfortunately its find-place is not known. It shows on the obverse the figure of a horseman, with the legend *Harṣa Deva*, and on the reverse that of an enthroned goddess. Cunningham attributes it also to Harsha of Kashmir. He does not give

[1] I doubt that in vii, 950, Kalhana must necessarily mean 'gold and silver coins.' The passage might very well mean no more than that "at that time the use of gold and silver *things* (*rukmaiś-ca rājataiś-ca*) was plentiful, while that of copper money (*dinnārais-tāmrajaiḥ*) was rare." He simply wanted to emphasize (no doubt exaggeratedly) the profusion of gold and silver during Harsha's reign as compared with his copper currency, which itself was very large. This interpretation is supported by the fact that no gold or silver coins of Harsha have ever been found, with the exception of the three specimens in question, the identity of which is more than doubtful. If Harsha's gold and silver currency had really been so plentiful, as the usual translation assumes, the total absence of any survival would be very strange.

his reasons. It cannot have been that passage of the *Rāja Taraṅgiṇī*; for the type of the coin is certainly not Karnatic. There is no reason either to connect the coin with Harsha of Malwa, still less with Harsha the Chandel, who reigned about 900–925 A.D. The type of our coin seems to me too early and too western for either attribution. There only remains the famous Harsha of Thanesar, commonly known as Harsha Vardhana of Kanauj, who reigned from 606 to 648 A.D. Not unfrequently he is simply called Harsha Deva, e.g., in the Harṣa Carita, the Nausarī Grant, and the Aphsad Stone Inscription (*Corpus Inscr. Ind.*, iii, p. 207; *Ind. Antiquary*, xiii, 73, 79). I believe the coin must belong to him. Its type is peculiar in its composition. The reverse type is the goddess seated on a throne (not cross-legged on a lotus) with the cornucopiæ in her left hand. The back-frame of the throne is recognizable by the two thick bands which run right and left from the waist of the goddess. This type, varied from a preceding "Zeus Enthroned with Sceptre," was commonly adopted by the Great Kushans and their successors the Little Kushans, who together ruled Gandhara and the Panjab from the third to the seventh century A.D. The type was adopted by the Early Guptas, but changed by them later on, about 410 A.D., into the "Goddess Seated Cross-legged on a Lotus and Holding a Lotus-flower." With the Little Kushans, from about 430 A.D., the type gradually degenerated, but it always remained the "Enthroned Goddess with Cornucopiæ," the throne being indicated by a cross-band, as in the coin of Yaśovarman, which will be noticed presently. But neither the Guptas nor the Kushanas join with the reverse goddess the obverse type of the horseman. Instead of it they always have the standing figure of the king. The horseman seen on the obverse of our coin is the peculiar western type of the "Horseman with Lance upright, or at rest, in his right hand." It is seen very distinctly in the coins of the Brahman Shāhis of Kabul, who reigned from about 880 A.D. It is evidently a variation of the preceding type of the "Horseman with Lance levelled, or at charge," seen, e.g., on

coins of Hermæus about 45–60 A.D.[1] For the intermediate time, the only evidence of the use of the "Horseman with Lance at rest," so far as I know, is our gold coin, and a few obscure copper coins (see Cunningham's *Coins of Mediæval India*, pl. vi, Nos. 11, 22, 23). The Brahman Shāhis use for the reverse a recumbent humped bull. Being Hindus, they may have introduced this reverse type; and it is possible that their predecessors, the Turki Shāhis, may have used the enthroned goddess of the Kushans with the obverse horseman. Anyhow, it is this peculiar combination of the "Horseman with Lance at rest" on the obverse, and the "Enthroned Goddess with Cornucopiæ" on the reverse, which we have on our gold coin of Harsha Deva. For myself, I am disposed to believe that the emblem of the "Horseman with Lance at rest" is the mark of the early Rajputs, i.e. the Hinduized Kushans, Huns, and other invaders. The chiefs of Thanesar were Rajputs (*Epigraphia Indica*, i, p. 68). On the whole, it appears to me that Harsha Vardhana has the best claim to the gold coin in question.

I now turn to a class of coins which I believe must be attributed to the celebrated Vikramāditya. I mean the coins of the Little Kushan type which bear the name of Yaśovarman. A specimen is shown in Cunningham's *Coins of Mediæval India*, pl. iii, No. 11, among the Kashmir coins (also in Mr. Rapson's *Indian Coins*, pl. iv, No. 22). They are not uncommon: fifty-seven were found in 1885 in the Sialkot District of the Panjab (*Proceedings* As. Soc. Beng., 1888, p. 180). Another was discovered in the Manikyala Stūpa (*Indian Antiquities*, vol. i, pl. v, No. 9, and pl. xxxi, No. 3). It is usual to place these coins among those of Kashmir, and to ascribe them to a certain Yaśovarman of Kanauj (Cunningham, *l.c.*, p. 44, n. 20; Rapson, *l.c.*, p. 32; Stein, Translation of the *Rāja Taraṅgiṇī*, p. 89 of Introd., and p. 132). Nothing appears to me more improbable. In the first place, there is no Yaśovarman among the kings of

[1] I follow the chronology as arranged by Mr. Vincent A. Smith in the J.R.A.S., January, 1903.

Kashmir. There was a Yaśovarman who belonged to the royal family, but he was never on the throne (*Rāja Tar.*, transl., i, 184), and besides, his date, about 850 A.D., is too late. Next, as to Yaśovarman of Kanauj, there is nothing to show that he ever advanced so far as Kashmir, still less that he ever was in possession of it. According to the *Gaüdavāha* (Sh. P. Pandit's ed., p. xxviii) he got no further than Thanesar. That work, written in praise of Yaśovarman's exploits by his court poet Vākpati, would not have failed to record his advance to Kashmir, if that had been a fact. From the account of the same occurrences, given in the Kashmirian Chronicle, *Rāja Taraṅgiṇī* (ch. iv, vv. 132–146; Stein's transl., vol. i, pp. 131–134), it is doubtful whether he got even so far as Thanesar. Yaśovarman's army and that of the Kashmirian king apparently met in the Doab ("the land between the Gaṅgā and Yamunā," *l.c.*, v. 132). There, as Kalhana sardonically relates, "the thoughtful ruler of Kanauj showed his back to the fiercely shining Lalitāditya (of Kashmir), and offered his submission" (*l.c.*, v. 135). But the offer was not accepted, and soon afterwards "Yaśovarman was uprooted entirely" (*l.c.*, v. 140). In these circumstances how should Yaśovarman strike coins of the Kashmir type? Even an Indian king is not in the habit of adopting a coin-type of a country by the king of which he is "entirely uprooted"!

Regarding Yaśodharman we gain much information from his own inscriptions (*Corpus Inscr. Ind.*, iii, 142–158; *Journal* A.S.B., lviii, 95, 96). His personal name was Viṣṇu Vardhana,[1] and he was originally only one, probably the most important, of the chiefs of the Mālava clans, and a feudatory of the Early Gupta empire. As such he had distinguished himself by his martial character, or as his surname Yaśodharman expresses it, "by making the attainment of glory his rule of life." About 533 A.D. he inflicted

[1] Both names are given to him in the Mandasōr Inscription. *Pace* Dr. Fleet (*Corpus Inscr. Ind.*, iii, 155, note 5), the identity is explicitly affirmed by the Sanskrit phrase *sa eva narādhipati*, 'this very same sovereign.' The words *janendra* and *narādhipati* are not exactly 'titles' (like *mahārāja*), but synonymic descriptions of sovereignty or chiefship.

a crushing defeat on Mihiragula, by which he delivered the Gupta empire from a threatening Hunic domination. It was this victory, and the great political changes consequent on it, which procured for him the title of Vikramāditya, and for the Mālava era its new name, by which it was henceforth known, of the Vikrama era. For his "ruling passion," stimulated by that great victory, led Yaśodharman on to set aside the last of the Early Gupta emperors, the weak Kumāra Gupta II, and to assume himself the imperial titles *rājādhirāja* and *parameśvara* (Mandasōr Inscr., l. 5; see Dr. Fleet's notes in *Corpus Inscr. Ind.*, iii, 156), thus founding the Mālava imperial dynasty. In his Mandasōr Pillar inscription (*Corpus Inscr. Ind.*, iii, 148) he boasts that he not only conquered the Huns, but that he ruled an empire vaster than that of the Guptas ever had been. This boast shows that his empire extended to the Indus, if not beyond it, and that it also included Kashmir, which had never formed part of the Gupta empire. From the somewhat confused account of the *Rāja Taraṅgiṇī* (ii, 7; iii, 125, with Dr. Stein's notes, and Introd., pp. 81, 83), one fact, at least, comes out clearly, that Vikramāditya, also called Harsha of Ujjain (Mālava), had conquered Kashmir. In view of these conquests, one might also expect Vikramāditya, or Yaśodharman, to strike coins of the Kashmir and Little Kushan type. That, as a fact, he did so appears to me to be proved by the coins now under discussion, which bear the name of Yaśovarman. The two forms *dharman* and *varman* are easily interchangeable, and the fact that the form *varman* was so frequently used just at this period (Fleet, in *Corpus Inscr. Ind.*, iii, 145, note 2), may well explain its occurrence on the coins in question. The circumstance that one of these Yaśovarman coins was found in the Manikyāla Stūpa is specially worth noting. Seeing that the Yaśovarman of Kanauj never got as far as the Indus, but was defeated in the Doab by the king of Kashmir, proves that he could not have deposited a coin of his in that stūpa. On the other hand, it is natural that Yaśodharman (Vikramāditya), who carried his victorious arms as far as

the Indus, should deposit a coin of his, struck in memory of his western conquests, as a votive offering, in that celebrated frontier stūpa.

It will perhaps be now admitted that I have shown sufficient reason[1] to believe that, while for this class of coins Yaśovarman of Kaṅauj is altogether out of the question, the celebrated Vikramāditya has the best claim to them,—at least, until a still better claimant can be produced. But there is another class of coins which, I believe, may also be ascribed to Vikramāditya. I mean the coins of the well-known Gupta type with the legend *Viṣṇu* on the obverse. There are, as Mr. Rapson informs me, 14 of them in the British Museum, and about 12 in the Hunterian Museum in Glasgow. One specimen is shown by Cunningham in his *Coins of Mediæval India*, plate ii, No. 4. He attributes it to Vishnu Gupta (c. 680 A.D.), of the Later Gupta dynasty (*ibid.*, pp. 12, 19). Herein he is followed, though doubtfully, by Mr. Rapson (*Indian Coins*, p. 26) and by Mr. V. Smith (*Gupta Coinage*, p. 116). The name *Gupta*, however, does not appear on any of them.[2] On the other hand, as Mr. Rapson truly observes, they "bear a great resemblance to those of Nara(gupta) Bālāditya and Kumāragupta II Kramāditya." These two points show that they belong to a king who bore the name Vishnu and was a contemporary of the Gupta emperors Narasiṁha and Kumāra II. The only Vishnu known in that period is the well-known Vishnu Vardhana, king of Mālava, who is the same as Yaśodharman, the conqueror of the Huns, afterwards called Vikramāditya (*Corpus Inscr. Ind.*, iii, 151, 155). To him I would attribute the coins in question. The mysterious letter *u*, seen between the legs of the king on the obverse, which has never been explained, I would suggest to be the initial of Ujjain, the capital of Vikramāditya. The reverse of these coins shows the title *Candrāditya*. This would seem

[1] I had already done so in 1888; see *Proceedings* As. Soc. Beng., 1888, pp. 180–183.

[2] Mr. Rapson, who, at my request, has kindly re-examined them, writes me (27-iv-03), "so far as I know, there is no trace of *-gupta*."

to be the title which Yaśodharman–Vishnu Vardhana at one time assumed. It is not impossible, indeed, that he never himself assumed the title Vikramāditya, but that it was given to him by his people and by posterity, just as the titles 'great,' etc., among ourselves.

The period of Indian history to which Vikramāditya belongs is still very obscure.[1] There is, however, not a little of contemporary evidence to be gathered from inscriptions and literature which I will try to put together, and indicate what conclusions, I believe, can be drawn from them. Yaśodharman's inscriptions show that, as a result of his victory, *circâ* 533 A.D., he founded an empire which exceeded that of the Guptas, and therefore, of course, must have taken its place. This empire, which I may call the Mālava empire (or that of Ujjain, after its capital town), did not last very long: it came to an end in 606 A.D., when Harsha Vardhana established his empire of Kanauj. The period in question, therefore, lies between 533 and 606 A.D. To this period belongs that Śīlāditya of whom Hiuen Tsiang says (*Siyuki*, i, 261) that he ruled Mālava about 60 years before his own time, that is, about 580 A.D. (640–60). The *Rāja Taraṅgiṇī* further tells us that this Śīlāditya[2] was the son of Vikramāditya, who is described (*R.T.* iii, 125) as being "the sole sovereign of the world." The only sovereign to whom that description can apply in the period immediately preceding 580 A.D. is Yaśodharman, the Mālava emperor, with his empire vaster than that of the Guptas. Therefore, Yaśodharman must be Vikramāditya.

There are contemporary indications which corroborate this identification. The *Rāja Taraṅgiṇī* (iii, 330) not only tells

[1] The view set forth in the sequel is substantially the same as that suggested by me, in 1889, in the *Journal* A.S.B., lviii, pp. 95 ff. It is now explained and supported more in detail, and especially relieved of the erroneous identification of Yaśodharman with Śīlāditya, which vitiated the theory in its original form.

[2] The identity of the Śīlāditya of the *Rāja Taraṅgiṇī* with the Śīlāditya of Hiuen Tsiang has always been assumed (Dr. Stein in note to *R.T.*, iii, 330, and Introd., p. 66); with what amount of truth, will be seen from the sequel. I may here note that for the *Rāja Taraṅgiṇī* (*R.T.*) I always refer to Dr. Stein's edition and translation.

us that Śīlāditya was the son of Vikramāditya, but also that he "had been dethroned by his enemies," but afterwards "replaced in the kingdom of his father" by Pravarasena II of Kashmir. About this Pravarasena it tells us that he was a son of Toramāṇa (*R.T.* iii, 104–109), and that he belonged to the "great race of Mihiragula" (*R.T.* iii, 57, 58), or, in other words, that he was a Hunic king. Seeing that Śīlāditya was "replaced in the kingdom of his father" Vikramāditya, who had founded the Mālava empire, he must have been a Mālava emperor; and since he was "dethroned by his enemies," the latter must have been rival emperors; and whereas he was assisted in his restoration by a Hunic king, the Huns must have been involved in the contest of the rival emperors. Let us see how far there is contemporary evidence to corroborate these three points.

In Harsha Vardhana's inscriptions (e.g., the Madhuban copper-plate, *Epigraphia Indica*, i, 72) his father Prabhākara, the chief of Thanesar, is described with the imperial titles (*paramabhaṭṭāraka* and *mahārājādhirāja*). This necessarily means that Prabhākara, whose date is about 580–606 A.D., had set up as a rival emperor, and this he could not have done without coming into warlike collision with the contemporary Mālava emperor Śīlāditya. Further, in Śarva Varman's Asīrgaḍh seal (*Corpus Inscr. Ind.*, iii, 220) we find his father Iśāna Varman, the Maukharī chief of Kanauj, bearing one of the imperial titles (*mahārājādhirāja*). Here we have an indication of another rival of the contemporary Mālava emperor. Iśāna's date, as shown by his coin, is 565 A.D.,[1] which is corroborated by the fact that, as shown by a comparison of their genealogies, he must have been a contemporary of Prabhākara's father Āditya Vardhana. Accordingly he must have set up as a rival of the Mālava emperor Vikramāditya, and the Maukharī chiefs must have come into warlike collision with the Mālava emperors.

[1] The possible dates, as shown by Dr. Fleet (*Indian Antiquary*, xiv, 68), are G.S. 245 or 265 or 275 = A.D. 565 or 585 or 595. But as the genealogies show, 565 is the only admissible date. See the chart in *Journal* A.S.B., vol. lviii. Cunningham read G.S. 257 = A.D. 577, which would not affect my argument.

There are some more confirmatory indications in the *Harṣa Carita*, which is a contemporary work of the Thanesar court poet Bāṇa. For he relates at length that the ruler of Mālava waged deadly war against both the chiefs of Thanesar and Kanauj. These chiefs, then, are the enemies who, as the *Rāja Taraṅgiṇī* says, dethroned Śīlāditya. According to the *Harṣa Carita*[1] the course of events was briefly as follows :— Prabhākara of Thanesar waged war with the lord of Mālava as well as with the Hūnas (*H.C.* 101); he was not altogether successful, for later on, just before his death, he had to send his son Rājya once more against the Hūnas (*H.C.* 132), and the lord of Mālava conquered Kanauj and slew Prabhākara's son-in-law, the Maukharī chief Grahavarman (*H.C.* 173); finally, the lord of Mālava is utterly defeated by Rājya (*H.C.* 176). The lord of Mālava is never named, but it can have been none other than Śīlāditya; there existed no other Mālava rival emperor at that time.[2]

The *Harṣa Carita*, moreover, affords indications for calculating fairly precise dates. Prabhākara had two sons, Rājya and Harsha, and a daughter Rājyaśrī. In the year of Rājyaśrī's conception, the elder son, Rājya, was "nearing his sixth year" (*H.C.* 115), and the younger brother, Harsha, was in his second year, for he could "just manage five or six paces with the support of his nurse's fingers" (*H.C.* 115), and "tiny teeth were beginning to adorn his mouth" (*H.C.* 116). The next year Rājyaśrī was born. Accordingly there were about four years between the two brothers and about three years between Harsha and his sister. Again, we are told that Prabhākara called to his court two Gupta princes,[3] Kumāra and Mādhava, to be companions to his

[1] In all the references to the *Harṣa Carita* (*H.C.*), I quote Cowell and Thomas' translation, by pages.

[2] It is worth noting that the Gauḍa king who murdered Rājya Vardhana is also never named, though it was the celebrated Śaśānka. The claims of Devagupta to be the lord of Mālava will be discussed in the sequel.

[3] The Gupta princes were sons of the king of Eastern Malwa (*H.C.* 119). They were kinsmen of Prabhākara; they were, in fact, his first cousins, though of course considerably younger than himself, for Prabhākara's mother, Mahāsenaguptā, was the sister of the two princes' father, Mahāsenagupta. The princes were the constant companions of Prabhākara's sons, and accompanied them on all their

own sons. The older, Kumāra, was "in age about 18 years" (*H.C.* 120); his companion, Rājya, must have been of about the same age. Harsha and his friend Mādhava, accordingly, would be about 14, and the sister Rājyaśrī about 11 years old. This exactly agrees with the statement (*H.C.* 121) that at this time Rājyaśrī had come to maturity "in a comparatively limited time." It cannot have been long afterwards that Rājya was sent by his father on an expedition against the Hūnas (*H.C.* 132), for on his return, only a few months, or possibly weeks, afterwards, it is said (*H.C.* 166) that his beard showed but "faint growth." He may have been about 20 at that time. Harsha, accordingly, can only have been about 16 in that year, which was the year of his own accession to the throne, because Rājya lost his life a few months afterwards. That this is correct is shown by the fact that Harsha is twice (*H.C.* 175, 239) said to have been a mere "boy" at this time. Now Harsha came to the throne in the Autumn (October) of 606 A.D. He must, therefore, have been born in 590 A.D., his brother Rājya in 586 A.D., and his sister Rājyaśrī in 593 A.D. Accordingly Prabhākara cannot have married Yaśovatī later than 585 A.D., and as he appears to have married soon after his accession to the throne, the latter event cannot be placed much earlier than 583 A.D. Prabhākara's marriage to Yaśovatī throws a sidelight on the cause of his setting up as a rival emperor. As her name shows, she must have been a daughter of the Mālava emperor Yaśodharman-Vikramāditya. When the latter died, Prabhākara probably put forward his claim to the imperial crown, for Vikramāditya's son, Śīlāditya (as will be shown in the sequel), was a 'pro-Hun,' and was not popular. It must be also remembered that Vikramāditya was really an usurper, for he had supplanted the old imperial Gupta family. But he was the deliverer from the Huns, and

expeditions (cf. *H.C.* 235). Mādhava, though the younger brother, eventually succeeded to the throne of Eastern Malwa, because his elder brother Kumāra must have been massacred with his companion Rājya by the Gauḍa king (*H.C.* 178).

a masterful ruler; and as long as he lived his empire was secure. But the usurpation was not altogether acquiesced in. A branch of the old imperial Gupta house was ruling in Eastern Malwa. The Maukharī chiefs of Kanauj were connected with it by marriage; so were the Rajput chiefs of Thanesar. It cannot surprise, therefore, that these chiefs espoused the cause of the Guptas, and disputed the pretensions of the Mālava emperors. The Maukharī Āditya Varman had married a Gupta princess Harshā (*Corpus Inscr. Ind.*, iii, Introd., 14). Her son Iśāna, as we have seen, assumed one of the imperial titles: this was in 565 A.D., during Vikramāditya's lifetime. The Thanesar chief, Āditya Vardhana, had also married a Gupta princess, Mahāsenaguptā (*Corpus Inscr. Ind.*, iii, Introd., 15). Her son Prabhākara assumed the full imperial titles; that is, he set up openly as a rival emperor. That, as we have seen, must have been about 583 A.D., and his doing so makes it probable that just at that time a change took place in the occupant of the Mālava throne. Vikramāditya must have died about 583 A.D. Accordingly his reign embraced about fifty years (533–583 A.D.). We shall presently see that there is some evidence to confirm this length of his reign. There was another reason for Prabhākara to persevere in disputing the succession of Śīlāditya, Vikramāditya's son. He had married his daughter Rājyaśrī to the Maukharī prince Grahavarman (*H.C.* 122), who in his person represented the Maukharī claims to empire.[1] This explains the attack of the Mālava emperor Śīlāditya on Kanauj in 606 A.D., when he killed Grahavarman and threw his consort Rājyaśrī into a dungeon, "confining her like a brigand's wife with a pair of iron fetters" (*H.C.* 173). This savage treatment of the princess throws an informing light on Śīlāditya's character, especially when we remember that Rājyaśrī was a young girl, not more than about 13 years of age.

[1] Grahavarman was the eldest son of the ruling Maukharī chief Avantivarman. He may have been about 18 years of age, his bride, as above shown, being about 11 years old. The wedding would have been in 604 A.D., and between that year and 606, when he was killed, Grahavarman must have succeeded his father.

We can now fairly follow the course of events. Yaśodharman Vikramāditya founded his Mālava empire about 533 A.D., and reigned up to about 583 A.D. He was respected as the deliverer from the Huns, as a strong and wise ruler, and as a patron of learning. On the whole his rule was not disputed, though the Maukharī chiefs of Kanauj (Iśāna Varman, etc.) were restive, and (as we shall see in the sequel) the Gupta chiefs of Eastern Malwa (Devagupta, etc.) as well. His son Śīlāditya was a man of a very different character, ferocious and unpatriotic (witness his relations to the Huns); and therefore, on his accession, about 583 A.D., the general discontent broke out openly. The Thanesar chief Prabhākara became the leader. He was marked out for the rôle he assumed; for he combined in his person the claims of his own house (through Yaśovatī) with those of his connections (by marriage), the Maukharīs of Kanauj and the Guptas of Eastern Malwa. So he set up as rival emperor, and with his confederates made war on the Mālava emperor Śīlāditya: these are "the enemies" of the *Rāja Taraṅgiṇī* (iii, 330). At first he was successful: Śīlāditya and his Hunic allies were defeated (*H.C.* 101). The result was that, as the *Rāja Taraṅgiṇī* (iii, 330) says, he was "dethroned," and had to take refuge in the Panjab or Kashmir with the Huns. Thence, later on, with the assistance of the Hunic king of Kashmir, Pravarasena II, he returned, and regained his possessions in Malwa, or, as the *Rāja Taraṅgiṇī* (iii, 330) says, was "replaced in the kingdom of his father" Vikramāditya. He now determined to pursue his success and re-subject the Maukharī and Thanesar chiefs (*H.C.* 173). In his attempt on Kanauj he was successful; he captured that capital, killed the king Grahavarman, and imprisoned his queen Rājyaśrī (*H.C.* 173). In the meantime Prabhākara had sent his son Rājya to attack Śīlāditya's allies, the Hūnas, in the north (*H.C.* 132), in their own country of Kashmir. But owing to his father's sudden death from fever a few months later, Rājya had to return immediately without effecting his object. On hearing of Śīlāditya's capture of Kanauj, and of his determination to

capture Thanesar also (*H.C.* 173), Rājya set out at once from the latter place, with a hurriedly gathered cavalry force (*H.C.* 175), to meet Śīlāditya, who was advancing from Kanauj. The opposing forces met, apparently, not very far from the latter town, and Śīlāditya was completely surprised and totally defeated (*H.C.* 178). The surprise, indeed, and the rout were so complete that it resulted in the capture of Śīlāditya's whole camp, including his personal equipage and the women of his court (*H.C.* 225).[1] The defeated emperor's cause had been espoused by Śāśānka, the king of Gauḍa. This king was holding Kanauj, while Śīlāditya had marched from there for the re-conquest of Thanesar. He now, while ostensibly surrendering the town to Rājya, treacherously murdered him, when he came "weaponless and confiding" (*H.C.* 178) to receive the submission. In the general confusion attending the deed, Rājyaśrī succeeded in effecting her escape from her prison (*H.C.* 224, 250). She fled into the southern wilds of the Vindhyā (*H.C.* 224), whence she was ultimately rescued by Harsha (*H.C.* 258).

The date of the signal defeat of Śīlāditya is well known. It took place some time in the Summer of 606 A.D. It marks the end of the second Mālava war, and the destruction of the Mālava empire. The question is whether it is possible to fix the date of the end of the first Mālava war which marked the temporary "dethronement" of Śīlāditya. I believe Bāṇa's narrative affords us a clue. He tells us (*H.C.* 116) that, about the time of Rājyaśrī's birth, "Yaśovatī's brother presented his son Bhaṇḍi, a boy of about 8 years of age, to serve the young princes" Rājya and Harsha. As we have seen, Rājyaśrī was born in 593 A.D., and Yaśovatī must have been a daughter of Yaśodharman-Vikramāditya. Her brother would be Śīlāditya, and Bhaṇḍi, therefore, would be Śīlāditya's son. Why should Śīlāditya, the emperor, give up (orig. *arpitavān*) his son to his rival Prabhākara? The

[1] Bāṇa does not say what became of Śīlāditya himself, whether he escaped or was killed. It has generally been assumed that he was slain in the battle (F. E. Hall in *Vāsavadattā*, pref., 52; M. Müller in *Ind. Ant.*, xiv, 233; Bühler in *Epigr. Ind.*, i, 70), but I do not know on what ground. But whether slain or not, it is certain that the battle finally disposed of him as an emperor.

reason that suggests itself is that Śīlāditya was under compulsion. He had been defeated and "dethroned" by Prabhākara, and could not avoid, or was forced by treaty into, surrendering his son to his rival and brother-in-law. If this surmise is correct, we obtain the year 593 A.D. for Śīlāditya's temporary dethronement. The indignity of the forced surrender of the son serves to explain the bitterness with which the second Mālava war was prosecuted between the two rivals, after Śīlāditya had been restored to the throne with the help of his Hunic friends. As to Bhaṇḍi, the name under which he is mentioned by Hiuen Tsiang is Po-ni (*Siyuki*, i, 210). It has generally been assumed that the latter is the Chinese misspelling or adaptation of Bhaṇḍi. But Bhaṇḍi itself is a strange name for a prince. It is neither a Sanskrit nor a Hindu name; and no other person has ever been found bearing it. Though it has a Sanskrit look, it is not really a Sanskrit word. It might be suggested to be a variety of the word *bhaṇḍa*, but that word means 'a buffoon,' and *bhaṇḍi* or 'buffoon' would surely be a strange name for an imperial prince. I would suggest that it was really a Hunic name, of which Po-ni and Bhaṇḍi are Chinese and Sanskrit adaptations respectively. That Śīlāditya should have given his son a Hunic name would be only another indication of his pro-Hun proclivities. It may seem strange to find Bhaṇḍi fighting against his own father (*H.C.* 175, 224, 225). But it must be remembered that he was only 8 years old when he was surrendered to Prabhākara (*H.C.* 116) in 593 A.D., and that at the latter's court he was treated by the king as a "third son," and by his children as a "fourth brother" (*H.C.* 117). It cannot surprise, therefore, that when Bhaṇḍi's father returned about eleven or twelve years later an utter estrangement had grown up between father and son, so that when Rājya Vardhana set out to meet his father in battle in 606 A.D. Bhaṇḍi preferred the cause of his friend Rājya to that of his father, to love whom he may never have had any cause.

There is another piece of contemporary evidence touching this period, which it is worth while considering. Harsha's

inscriptions (e.g. the Madhuban copper-plate in *Epigr. Ind.*, i, 72) mention a certain Devagupta as one of the kings (*rājāno*) who were "subdued in battle" by Rājya Vardhana. It has rightly been held that the passage can only refer to the great battle in which Rājya broke the power of the Mālava emperor, who, as we have seen, was Śīlāditya, the son of Vikramāditya. The inscription does not say of which country Devagupta was king (*rāja*), but it suggests itself to connect him with the two princes Kumāragupta and Mādhavagupta, who, as Bāṇa tells us, were brought to Prabhākara's court and were "sons of the Malwa king" (*mālava-rāja*, *H.C.* 119). In that case, Devagupta being a king of Malwa,[1] the question further suggests itself: was he the father of those two princes? Now, in the Aphsad inscription of Ādityasena (*Corpus Inscr. Ind.*, iii, 200) we have the genealogical tree of the Later Gupta kings. This tree gives us Mādhavagupta as the son of Mahāsenagupta; and as we know that the latter was the maternal uncle of Prabhākara, there can be no doubt as to the identity of the Mādhavagupta of the Aphsad inscription with the prince Mādhavagupta who was sent to Prabhākara's court. It is evident, therefore, that Devagupta cannot have been the father of Mādhavagupta. But if he was not the father, in what other relation can he have stood to him? Here it is to be observed that Mahāsenagupta belonged to the generation of Āditya Varman (Prabhākara's father), who married his sister Mahāsenaguptā, while Mādhavagupta belonged to the generation of Harsha (Prabhākara's son), whose associate he was, according to the Aphsad inscription (line 15), as well as according to the *Harṣa Carita* (*H.C.* 120, 235). There is clearly here a gap: some member is wanted between

[1] Bühler, who also holds that Devagupta was a king of Malwa, suggests (*Epigr. Ind.*, i, 70) that this country might be a "Mālwa in the Panjab, much nearer to Thanesar." This is an error. There is no Malwa in the Panjab at all, so far as I know. There is, however, a Malwa in the North-West Provinces, in the Fatehpur District, on the Ganges; and probably Bühler had this Malwa in his mind. (Cowell and Thomas, in the Preface to their translation, p. xii, state it as a fact.) But it is distant no less than about 350 miles from Thanesar. Moreover, it is a small place, and there is no evidence that it ever was the capital of a state.

Mahāsena and Mādhava to correspond to the generation of Prabhākara. Devagupta would just fill that gap; and, curiously enough, the wording of the Aphsad inscription points not only to the existence of a gap, but also indicates how it is to be filled up. Every member of the royal line, except one, is expressly stated to be the son (*suta* or *tanaya*) of his predecessor. That exception is Mādhava. Of him it is not said that he was the "son" of his predecessor Mahāsena, but only that he "came from him" (*tasmād abhūt*). But further, this phrase is explained by saying (l. 11) that Mādhava came from Mahāsena just as the god Mādhava (i.e. Krishna) came from Vasudeva. The latter had eight sons out of Devakī, and Krishna was the youngest. The phrase, therefore, indicates that Mahāsena had a number of sons, of whom Mādhava was the youngest; and I suggest that Devagupta was the oldest of them, or, at least, older than either of the two brothers Kumāra and Mādhava. Thus there would certainly have been three sons of Mahāsenagupta, and, of course, there may have been more. But in any case there would be an appreciable interval in age between Deva and Mādhava, probably eight or ten years, for Kumāra was four years older than Mādhava. This interval would explain the gap in the genealogical list in point of generation: Devagupta would correspond to Prabhākara.

I conclude, then, that Mahāsena was followed, on the throne of Eastern Malwa, by his eldest son Deva; and Deva was followed by Mādhava. Kumāra did not reign, because, in all probability, he accompanied Rājya Vardhana in his campaign against Śīlāditya, and, like him, fell a victim to the treachery of the king of Gauḍa. Now, though the Aphsad inscription is silent regarding the reign of Devagupta, there is evidence that, as a fact, he did reign: we have it in the inscriptions of the Vākāṭaka chief Pravarasena II (*Corpus Inscr. Ind.*, iii, 235). In these inscriptions Pravarasena is described as the maternal grandson of the Mahārājādhirāja Devagupta. The title *mahārājādhirāja* not only proves that he was a reigning sovereign at one time, but that he put

forward some claim to the imperial dignity, similar to that of the Maukharī chief Iśāna Varman, who (as we have seen) also assumed the imperial title *mahārājādhirāja*. Of course, it remains to be proved that the two Devaguptas are identical. Bühler, who noticed the antique character of the letters of the Vākāṭaka inscriptions, suggested as their date "the middle of the fifth century" (*Indian Antiquary*, xii, 240), but did not attempt to identify Devagupta. Dr. Fleet, though he felt the palæographic difficulty, nevertheless identified Devagupta with the Devagupta of the Later Gupta list, who was "the son Ādityasena, and belongs to the period of about A.D. 680–700" (*Corpus Inscr. Ind.*, Introd., 15). Professor Kielhorn, in *Epigraphia Indica*, iii, 260, simply accepted Dr. Fleet's identification. For myself, I have no hesitation in identifying the Devagupta of the Vākāṭaka inscriptions with the Devagupta of the Harsha inscription. This identification satisfies sufficiently the palæographic demands; and I feel certain that if Dr. Fleet had known the Madhuban inscription of Harsha at the time he wrote about the Vākāṭaka inscriptions, he would have anticipated me in suggesting it.

Devagupta's position, however, in the rival contest of that period is not quite clear. For while, on the one hand, his title of *mahārājādhirāja* proves him to have been a claimant of the imperial dignity, he appears, on the other hand, in the battle of Rājya Vardhana against Śīlāditya in 606 A.D. on the side of the latter. What probably happened was this: we have seen that the two brothers Kumāra and Mādhava were sent to Prabhākara's court (*H.C.* 119). They are not likely to have been sent by their elder brother, who laid claim to the imperial dignity, but by their father Mahāsenagupta. The latter, accordingly, must have been still reigning at that time. As Kumāra was then 18 years of age (*H.C.* 120), the same as his friend Rājya, who was born in 586 A.D., the year of his being sent to Prabhākara's court must have been 604 A.D. Accordingly Mahāsena was still alive and reigning in 604 A.D. He probably died, however, in the same year; the sending of

his two sons may have been his dying arrangement. He was succeeded by Deva, who at once assumed the imperial title. By this assumption he would naturally come into collision with Prabhākara, who since the dethronement of Śīlāditya in 593 A.D. had been the head of the empire. This explains two things: (1) how it came to pass that on Śīlāditya's restoration and march to the re-conquest of Kanauj and Thanesar, Devagupta is found on the side of Śīlāditya fighting against Rājya Vardhana, by whom he was defeated in 606 A.D., as mentioned in Harsha's inscriptions; (2) how it was that he is omitted from the Later Gupta genealogical list; the Guptas evidently looked upon him as a renegade of whom they had no reason to be proud.

There may, however, have been a more cogent reason for Devagupta's exclusion from the genealogical list. From Bāṇa's account of the occurrences it appears that, while Rājya lost his life through the treachery of "the king of Gauḍa" (*H.C.* 178), "a man named Gupta," as Bāṇa contemptuously calls him (*H.C.* 224), was also implicated in the deed. In another place (*H.C.* 251) Bāṇa calls him "a noble called Gupta." In both cases he disdains to call the accomplice by his proper name. I suggest that this accomplice was Devagupta. He had joined Śīlāditya in his capture of Kanauj, had shared his defeat at the hand of Rājavardhana, had afterwards escaped back to Kanauj, and finally assisted the king of Gauḍa,[1] who was holding

[1] According to Hiuen Tsiang (*Siyuki*, i, 210) the king of Gauḍa's name was Śāśāṅka, and his country was Karṇa-suvarṇa. The latter has been rightly identified by Mr. Beveridge with Rangmaṭī, near Berhampur in Bengal (*Journal* A.S.B., lxii, 315). The name Narendragupta has also been attributed to Śāśāṅka, but on quite insufficient grounds. Cunningham (*Survey Reports*, ix, 157) says (in 1879) that he "learned from Dr. Bühler that in the Jain Books Sasāṅgka is called Narendra Gupta." But Bühler (*Epigr. Ind.*, i, 70), in 1888, bases his information only on "one MS. of the *Śrīharshacharita*." That manuscript information cannot have been of much value, for it is entirely ignored by the translators Cowell and Thomas. Beal, in n. 16 to his *Siyuki*, i, 210, states the name as a fact; but it does not appear that he had any other basis for his statement than Cunningham's apparently misunderstood information of Bühler. Practically, therefore, Narendragupta as a name of Śāśāṅka is a delusion. The latter's real identity and relation to contemporary dynasties still requires elucidation. I may return to this some day; the present paper is already too long for it.

the town, in the treacherous murder of Rājya. If we remember that, as I have pointed out, in all probability Kumāragupta was with Rājya at the time, and shared his miserable fate, it sufficiently explains the detestation in which Devagupta must have been held by his family, and his total exclusion from mention in the family list.

The leading events of the period may now be chronologically tabulated thus:—

A.D.

c. 533. Vikramāditya (Yaśodharman-Vishnuvardhana) defeats the Huns, founds the Mālava empire, and reigns *c.* fifty years.

c. 583. Prabhākara succeeds to the chiefship of Thanesar, and sets up a rival claim to empire. A ten years war ensues with Mālava.

c. 593. Śīlāditya, son of Vikramāditya, is dethroned, and retires to the Huns of the Panjab and Kashmir.

c. 604. Devagupta, chief of Eastern Malwa, also sets up a rival claim, but submits to Śīlāditya, who has returned and regained Malwa with the help of Pravarasena II of Kashmir.

606. Decisive battle between Śīlāditya and Rājya Vardhana, resulting in the final destruction of the Mālava empire.

In addition to the contemporary evidence, above discussed, we have two traditional accounts of the period in question: one by Hiuen Tsiang, the other in the *Rāja Taraṅgiṇī*. Hiuen Tsiang's account has the advantage of being nearly contemporary. As he was in India between 629 and 645 A.D., he was separated from the period under discussion only by about thirty years. On the other hand, being a foreigner, it cannot be expected that he always grasped correctly all the details of the historical information which he gathered, and which for him, the Buddhist monk, could not have the paramount interest necessary for an accurate presentment in his report. The events connected both with Vikramāditya and Śīlāditya were so recent that they must still have been prominent in people's minds at the time of Hiuen Tsiang's visit. As a fact, he mentions both these monarchs by name, and recites the stories he heard about them. But, what can hardly surprise in his case, he confounds the two

men, and ascribes to Vikramāditya what really refers to Śīlāditya, and *vice versa*. The failure to notice this confusion of Hiuen Tsiang's has led to much misunderstanding of his reports. Thus, in *Siyuki*, i, 106, he relates about Vikramāditya that he was king of Śrāvastī and a man of wide renown; but he is given a very unpleasant character. He is an ill-conditioned person, who, out of jealousy of the saint Manorhita, played a mean trick on him, in consequence of which Manorhita predicted evil on him. This prediction came true; for (*ibid.*, 108) a little afterwards Vikramāditya lost his kingdom, and was succeeded by a monarch who widely patronized men of literary merit. It has generally been supposed that the successor of Vikramāditya here referred to is Śīlāditya of Ujjain. But this is impossible; Śīlāditya of Ujjain is not known for any literary patronage. The fact is that Hiuen Tsiang has been confounding the two men; what he says about Vikramāditya refers to Śīlāditya, and the successor, of course, is Harsha Vardhana. Vikramāditya did not lose his kingdom, but Śīlāditya did. Also Vikramāditya's character was very different from that described in the passage above referred to. His true character is described by Hiuen Tsiang in another passage (*Siyuki*, i, 261; see also his *Life*, p. 148), where, however, he wrongly gives it to Śīlāditya. He says about Śīlāditya (*recte* Vikramāditya) that he was a man of eminent wisdom and great learning, that he respected the "three treasures" of Buddhism, that he was never angry nor injured anyone, that he endeared himself to his people, and that his memory was still (in Hiuen Tsiang's time) revered. He further says of him that he ruled "for fifty years and more," and that he flourished about sixty years before his own time. Now Vikramāditya (= Yaśodharman) became emperor *c.* 533 A.D., and if he ruled "fifty years or more," he reigned down to *c.* 583, which is quite correctly "sixty years before" Hiuen Tsiang. All Indian tradition is unanimous in ascribing to him wisdom and literary patronage. And if he was "endeared to his people" and "his memory was revered," it is not likely that he would "lose his kingdom."

Nor is there any evidence of his ever having lost it. The fact of the matter is: Hiuen Tsiang simply confounds two names, while he reports the facts correctly. With the true key to his reports, all his statements fall into their proper places.[1]

Let us now turn to the account in the *Rāja Taraṅgiṇī*. It is, as has been recognized long since and by everyone, much confused. But I am not sure that the true cause of the confusion has been quite realized. The fact is that Kalhana, who lived upwards of five centuries (1148 A.D.) after the period in question, had before him several different legendary accounts of it. They, no doubt, were contained in one or the other of those eleven early chronicles to which he refers as his sources (i, 14, and Dr. Stein's Introd., p. 24). Some of them were so contradictory that, as he himself says (ii, 6), he refused to accept them as accounts of the same events, but treated them as relating to successive events. The result naturally was that grotesque chronology which "places the father [Toramāṇa] 700 years after the son [Mihiragula]," the latter himself being placed 1200 years too early (Dr. Stein's Introd., pp. 65, 66, and his note to *R.T.* i, 103; Dr. Hultzsch in *Indian Antiquary*, xix, 262). There were, more especially, two contradictory traditions. One, related in chapter ii, centred round Pratāpāditya; the other, in chapter iii, round Pravarasena II. According to the former, (1) Pratāpa's predecessor (not father) Yuddhiṣṭhira, who belonged to the race of Mihiragula, was in prison (ii, 4); (2) he himself, a relative of Vikramāditya, was placed on the throne by the ministers (ii, 5); (3) at that time Harsha was over-lord of Kashmir (ii, 7); (4) Pratāpa's grandson was Tuñjīna (ii, 11); (5) later on, one Sandhimat, not of the

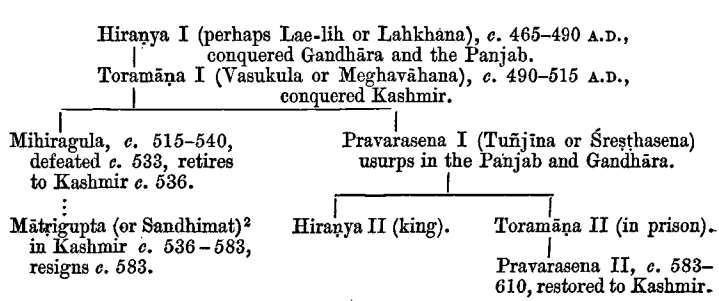
[1] In the passage (*Siyuki*, i, 267) where he says that Dhruvabhaṭa was the nephew of Śīlāditya, the latter name may or may not be correct. I have not investigated the point as it in no way affects the history of the period I am considering. If Hiuen Tsiang's report is correct that Dhruvabhaṭa was both the nephew of Śīlāditya and grandson-in-law of Harsha Vardhana, of course, he cannot in this case be confounded with Vikramāditya, but must be the real man of that name. But is the report necessarily correct?

royal line, was king (ii, 117). According to the other tradition, (1) Pravarasena's father, Toramāṇa, who belonged to the race of Mihiragula (iii, 57, 58), was in prison (iii, 104, 121); (2) he himself was called to the throne by the ministers (iii, 281); (3) at that time Harsha (=Vikramāditya) was over-lord of Kashmir (iii, 125, 186, 187); (4) Pravarasena's grandson was Tuñjīna (=Raṇāditya, iii, 386); (5) intermediately, one Mātṛigupta, not of the royal line, was king (iii, 239). Obviously these two traditions refer to the same events: Pratāpa corresponds to Pravarasena, and Sandhimat to Mātṛigupta. But the second tradition is much nearer the truth: Vikramāditya (Harsha), having deprived the Hunic king (Toramāṇa) of his throne, placed on it a creature of his own (Mātṛigupta), who, later on, was displaced by a son of the former Hunic king (Pravarasena). The first tradition is altogether confused. Tuñjīna is a Hunic name; yet he is represented as the grandson of Pratāpa, who is said to be a "relative" of Vikramāditya! The second tradition goes on to relate that Pravarasena assisted Vikramāditya's son, Pratāpaśīla or Śīlāditya, to recover his parental kingdom (iii, 330). It may be that here we have the root of the story of the first tradition about Pratāpāditya being a "relative" of Vikramāditya, who gave him the throne of Kashmir. For Pratāpāditya has some features in common with Pratāpaśīla as well as with Mātṛigupta. A curious point about the otherwise fairly accurate second tradition is that it entirely ignores Mihiragula. He is prominently mentioned, however, in a third tradition which Kalhana had also before him, and which he has worked into his first chapter. According to this tradition, Mihiragula was the son of Vasukula, and grandson of Hiraṇyakula (i, 288, 289). From Mihiragula's own Gwaliyor inscription (*Corpus Inscr. Ind.*, iii, 163) we know that he was a son of Toramāṇa. It follows, then, that Vasukula is another name of Toramāṇa; and as the second tradition makes Pravarasena to be a son of Toramāṇa, it would further follow that Toramāṇa had two sons, Mihiragula and Pravarasena, or that Mihiragula had a brother

Pravarasena. Now here comes in a fourth tradition, which is reported by Hiuen Tsiang. According to him (*Siyuki*, i, 165 ff.), after Mihiragula had set out for the conquest of the Gupta empire, a younger brother of his, whom he had left behind, usurped the throne in his home dominions (the Panjab, Gandhāra), and when he tried to return after his defeat, finding his brother in possession, he took refuge in Kashmir, the king of which country put him in charge of a small territory. The really important point in this relation is that Mihiragula had a younger brother, and that, therefore, Toramāṇa had two sons. The name of that younger brother may have been Pravarasena. At the same time, it is to be noticed that Hiuen Tsiang's tradition distinguishes between the (unnamed) king of Kashmir, who gave an asylum to the defeated Mihiragula, and the (unnamed) younger brother of Mihiragula, and that, while the third tradition of the *Rāja Taraṅgiṇī* makes Hiraṇya(kula) to be the father of Vasukula–Toramāṇa and grandfather of Mihiragula (i, 288, 289), the second tradition represents Hiraṇya as being the brother of Toramāṇa (iii, 102), and therefore uncle of Mihiragula.

I do not profess, with the information at present available, to explain all the obscurities of the four traditions, or to harmonize them. But one point is certain. If the *Rāja Taraṅgiṇī* is correct in asserting that Pravarasena assisted in the restoration of Śīlāditya, his father Toramāṇa cannot have been the same as the Toramāṇa who was the father of Mihiragula. For, as we have seen, Śīlāditya's restoration must be placed in 605 A.D., while Mihiragula's father must have died before 515 A.D. (*Corpus Inscr. Ind.*, iii, Introd., p. 12). It follows that Pravarasena II himself cannot have been the younger brother of Mihiragula. That brother might have been, however, Pravarasena I, also called Tuñjīna and Śreṣṭhasena, who, according to the *Rāja Taraṅgiṇī* (second tradition, iii, 97, 102–109), was the grandfather of Pravarasena II. If so, Pravarasena I's father, Meghavāhana, who is said (*R.T.* iii, 2) to have been brought from Gandhāra to be king of Kashmir, would be the

well-known Toramāṇa I, the father of Mihiragula. We should then have also two Hiraṇyas: one, the grandfather of Mihiragula; the other, the nephew of Mihiragula and brother of Toramāṇa II.[1] All this would suit the known dates well enough. It may be exhibited in the following table :—


Hiraṇya I (perhaps Lae-lih or Lahkhana), c. 465–490 A.D.,
conquered Gandhāra and the Panjab.
Toramāṇa I (Vasukula or Meghavāhana), c. 490–515 A.D.,
conquered Kashmir.
Mihiragula, c. 515–540,
defeated c. 533, retires
to Kashmir c. 536.
Mātṛigupta (or Sandhimat)[2]
in Kashmir c. 536–583,
resigns c. 583.
Pravarasena I (Tuñjīna or Śreṣṭhasena)
usurps in the Panjab and Gandhāra.
Hiraṇya II (king).
Toramāṇa II (in prison).
Pravarasena II, c. 583–
610, restored to Kashmir.

Pravarasena II espoused the cause of Vikramāditya's son Śīlāditya, and assisted in his restoration. He must have had some good cause to go to the assistance of a man whose father had dethroned his own granduncle, Mihiragula, and was detested by him (*R.T.* iii, 265, 266, 282). I would suggest that Śīlāditya had reversed his father's policy and favoured the Hunic chiefs, and it was this policy that led to his general unpopularity, to the rise of the Thanesar chiefs as rival emperors, and the destruction of the Mālava empire.

[1] In the light of this information it seems desirable to re-examine the coins of Hiraṇya, Toramāṇa, and Mihiragula. See *Ind. Ant.*, xv, 245, and *Proceedings* A.S.B., 1885.

[2] Mātṛigupta is said to have reigned only about 5 years (*R.T.* iii, 264), but Sandhimat is given 47 years (*R.T.* ii, 142). Deducting 47 from 583, we obtain 536 as the year of Vikramāditya's conquest of Kashmir.

CORRESPONDENCE.

1. The Mahābhārata and the Drama.

Dear Professor Rhys Davids,—In his excellent book "The Great Epic of India," Professor Hopkins has shown (pp. 54–57) that in the whole of the Mahābhārata there is no mention of the drama, except in one single line, Mahābh. II, 11, 36, where Drama is personified:—

nāṭakā vividhāḥ kāvyāḥ
kathākhyāyikakārikāḥ |

Professor Hopkins remarks that this line "belongs clearly to an interpolated scene, and the fact that real drama, *nāṭaka*, is mentioned only here in the whole epic till the Harivaṃśa, should show its age." Now I quite agree with Professor Hopkins' view as to the lateness of the whole scene. Still the mention of the Nāṭaka proves nothing for the date of the *lokapālasa-bhākhyāna*, as the line in question has been interpolated even later than the whole scene itself, and would not be allowed to stand in a critical edition of the Mahābhārata, if we had one. For in the Malayalam MS. of the Sabhāparvan (R.A.S., Whish, No. 18) *this line is missing*. I give the whole passage (II, 11, 31–36) from the Malayalam MS., without correcting any mistakes:—

ṛgvedas sāmavedaś ca yajurvedaś ca pāṇḍava |
atharvavedaś ca tathā parvāṇi ca viśāmpate |
itihāsopavedāś ca vedāṅgāni ca sarvaśaḥ |
sāvitrī durggatārī vāṇī saptavidhā tathā |

medhā dhṛtiś śuciś caiva prajñā kṣāntismṛtir yaśaḥ |
samāni stutigītāni gāthāś ca vividhā api |
bhāṣyāṇi tarkayuktāni dehāyanti viśāmpate |
kṣaṇo lavo muhūrttaś ca divā rātriś ca bhārata |

The Telugu MS. of the India Office agrees here with our editions, but there can be no doubt that the line in which the drama is mentioned is the work of a very recent interpolator. For the Rev. J. Dahlmann ("Mahābhārata als Epos und Rechtsbuch," p. 298) the passage in question was a very welcome proof of the existence of a dramatic literature in the fifth century B.C. (his date of the Mahābhārata-Smṛti). There was in his opinion no reason why this passage should be, as Professor Sylvain Lévi ("Le théâtre Indien," App., p. 58) said, "plus que suspect." From the point of view of textual criticism, the Rev. J. Dahlmann said there could be no objection to describing that verse or that passage as 'old.' Now we see that it is real 'textual criticism' which proves the very line in which *Nāṭaka* occurs to be anything but 'old.' This shows again how important the South Indian MSS. of the Mahābhārata are, and it is one more proof of the great need of a *critical edition* of the great Hindu epic.

M. WINTERNITZ.

Prague, April 19, 1903.

2. TIBETAN MSS. IN THE STEIN COLLECTION.

Washington, D.C.
April 6th, 1903.

DEAR PROFESSOR RHYS DAVIDS,—I have read with great interest Mr. Barnett's article, which appeared in the January number of the Society's Journal, on the Tibetan MSS. in the Stein Collection.

I have only had Dr. Stein's Preliminary Report and the accompanying plate (xvi) for the purpose of studying this valuable Tibetan document. Dr. Stein (p. 57) is inclined to believe that the Endere site, where the find was made,

was deserted earlier than Dandan-Uiliq, which he tells us (p. 40) was probably abandoned about the end of the eighth century. On the other hand, Mr. Barnett, relying on a Chinese sgraffito found in the same building as the Tibetan fragments, states his conviction that the latter cannot be dated later than the eighth century.

While I am unable, without having seen this Chinese sgraffito, to express an opinion on this important question, I must confess that I fail to see how it can fix the date of Tibetan manuscripts found scattered about the building on which it was scrawled.

However, I am ready to agree with Mr. Barnett that these fragments are among the earliest known relics of Tibetan literature which have reached us. We have fortunately, for purposes of comparative study, a document in Tibetan dating from the early part of the ninth century, and consequently practically contemporaneous with the Stein fragments, and which has the inestimable value of being dated, or rather whose date we can exactly fix by means of unimpeachable historical records, both Tibetan and Chinese. I refer to the tablet, locally called the *do-ring*, still standing in Lhasa before the great temple or *Jo-wo k'ang*, which gives the text in Tibetan and Chinese of a treaty concluded in A.D. 822 between the Emperor of China, Mu Tsung, and the King of Tibet, Ralpachan. A fairly good facsimile of a rubbing taken of this inscription was published in the Journal of the Society by Dr. S. W. Bushell (see N.S., XII, pp. 435–541).

I have compared the spelling of the Tibetan part of the Lhasa inscription with that of the Stein fragments, and have found that in both *myi* (མྱི) is used instead of *mi* (མི) 'not,' *myed* (མྱེད) for *med* (མེད) 'not, nothing,' and *mying* (མྱིང) instead of *ming* (མིང) 'name.' Mr. Barnett tells us that in other leaves of the Stein fragments he has examined he has found *mye* (མྱེ) for *me* (མེ) 'fire,' and *dmyigs* (དམྱིགས) for

dmigs (དམིགས) 'thought, idea.' Not one of the other singular features noted by Mr. Barnett in the MSS. occurs in the inscription. The absence of a final *d* at the end of words, which in the modern language terminate in *r*, *l*, or *n*, is particularly interesting. It has *bkur* (བཀུར), *sbyar* (སྦྱར), *hphrul* (འཕྲུལ), *mjal* (མཇལ), *yul* (ཡུལ), *rdul* (རྡུལ), *dbon* (དབོན), *phrin* (ཕྲིན), etc., which is the spelling of the present day.

As regards the use of *y* between *m* and the vowels *i* and *e*, I am inclined to see in it an attempt, since abandoned, to differentiate, in certain cases, words with nearly the same sound in the spoken language of the time. Mr. Barnett remarks that while *mye* (མྱེ) is used in the fragments for *me* 'fire,' it is written *me* (མེ) in the compound word meaning 'flower' (*me-thog* མེ་ཏོག). This, it seems to me, confirms my view, for there was no possibility of confusion in this case. At the present time, I may remark, such words as སྨྱ་བ 'sickness' are pronounced *nya-wa*, སྨ་བ 'to wound' is *ma-wa*, སྨྱུག་མ 'a reed pen' is *nyug-ma*, but སྨུག་པ 'a fog' is *mug-pa*; but when the language was first fixed in writing all superposed letters which were prefixes were pronounced (see Schiefner, *Tibetische Studien*, p. 330).

As to the frequent use in the Stein fragments of final *d* after *r*, *l*, and *n*, I hesitate to accept it as evidence of an archaic form, but think it is probably an irregularity peculiar to the copyist, in other words simply a fault in spelling. In two cases at least in the fragments published in the Preliminary Report (pl. xvi), the final *d* seems only explainable by supposing it introduced for the sake of euphony. I refer to line 2 of the first fragment, where we have *tinge-hdzind-to* (དྲིན་འཛིན་ཏོ), which then as now must

have been pronounced *tingen-dzindo*. The second example is in the fifth line of the same fragment, *ma-nord-pa dang* (མ་ནོར་ད་བ་དང), which in many portions of the country would still be pronounced *ma-nord-pa dang*, though written *ma norpa dang*. As to evident cases of irregular spelling, we find one in the first fragment on the first line, where we have *hdhi lta ste* (འདི་ལྟ་སྟེ), while on the second line we have the correct form in *hdi lta bu* (འདི་ལྟ་བུ). On the third line we have *bkah stsalr to* (བཀའ་སྩལ་ཏོ) instead of *bkah stsal to*.

The second Stein fragment on pl. xvi, although I think written by the same hand which wrote the first, does not contain any of the singular orthographic features found in the latter, with the sole exception of the use of *myi* (མྱི) instead of *mi* (མི) 'not.'

On the whole, I am not yet ready to accept the views expressed by Mr. Barnett as to the "enormous importance of the Stein fragment for the knowledge of Tibetan palæography and orthoepy" until the peculiarities met with in them have been found in a much larger number of texts—(1) because a practically contemporaneous document, the Lhasa inscription, does not offer similar irregularities, except as regards the use of *y* between *m* and the vowels *i* and *e*; (2) as regards final *d* after *l*, *n*, and *r*, the use of double final suffixes (there are ten in Tibetan, *g*, *ng*, *d*, *n*, *b*, *m*, *r*, *l*, *s*, and *a*) is in violation of a well-known rule of Tibetan grammar as laid down in the works of the early Indian missionaries and interpreters who in the seventh or eighth centuries—at all events somewhere near the time when these fragments were probably written—gave the present script to the country and a regular orthography, which, so far as we know, has never been departed from in good manuscripts, books, and lapidary inscriptions.—Very sincerely yours,

W. W. ROCKHILL.

3. The Far East.

5, *New Square, Lincoln's Inn.*
May 1*st*, 1903.

Dear Professor Rhys Davids,—I was delighted to see in the April number of the Journal an announcement to the effect that the Society proposes in the future to devote more space to the Far East than it has hitherto been able to do. As one of a minority of members whose interests in matters Asiatic are almost confined to the regions *ultra Gangem*, I am free to confess that I have for some time past felt that our special subjects were not meeting with as much recognition as their relative and growing importance seemed to me to deserve, while the Aryan and Semitic fields of study were, in my humble judgment, getting more than their fair share of attention. In the vast fields of research represented by Indo-China, the Indian Archipelago, the Chinese Empire, Korea, and Japan, amounting as they do in point of population to more than the half of Asia, and including at least a like proportion of subjects of interest, there is far more left to do than in India and South-Western Asia, which have been worked at so long and so thoroughly. Yet even the excellent pioneer work that has been done in the Far East, much of it by foreign scholars, but a good deal by British also, is virtually unknown in this country, except amongst a very limited circle of readers; and that mainly because there has been no sufficient opportunity of making them acquainted with it. The new venture seems to me to be well calculated to further this end, as well as to encourage new lines of research; and even if it only keeps us in touch with current work in these outlying fields, it will be fulfilling a very useful function. I think the Council are to be congratulated on their action in the matter.—I am, yours very truly,

C. Otto Blagden.

4. Ptolemy's Geography.

Florence.
April 25th, 1903.

Dear Professor Rhys Davids, — I see that we are going to publish Colonel Gerini's Researches on Ptolemy's Geography. The set of maps to illustrate that work, which were made *circâ* 1552–78 by Ignazio Danti, still exist in the Guardaroba of the Palazzo Vecchio, Florence. Vasari states that the maps are Ptolemy's brought up to date. There are fifty-three of them, and three relate to India. Palibothra, Gaur, Bengala, Rhotasgarh, Satgaon, etc., are marked on them, and they appear to be of interest as being nearly a century earlier than those of Bleau. On one of the maps of India is the date 1575. Danti belonged to Perugia, and was a brother of the sculptor Vincenzio. He executed the maps for Cosimo, the first Grand Duke. The maps are large (Vasari says two braccia high), and are painted on walnut-wood on the panels of the wardrobe. Vasari, I believe, describes them in his book about painters, etc., published at Florence in 1568, p. 877, but I only know his account from a quotation in a book by Leonardo Ximenes on the ancient and modern Florentine gnomon (Florence, 1757, p. xliii). It seems to me that Danti's maps must be about the earliest that we have of Bengal, though of course there must be earlier Portuguese ones. There surely must be somewhere a monograph on Danti's work. Tiraboschi, I believe, has a notice of him, and he is also in the Biographie Universelle.—Yours sincerely,

H. Beveridge.

5. "The Far East."

Seend Lodge.
May 4th, 1903.

Dear Professor Rhys Davids,—I am very glad to see that it is proposed to bring out a periodical specially devoted to the consideration of matters of Far Eastern inquiry.

The Far East differs from the nearer and middle East in nearly every important particular of its civilization and history. It became essentially Sinesian in both these respects, and if a wave of Buddhism passed over the immense tract and its enormous population, its influence, never fundamental, but rather of a stimulative than of a creative character, has ceased—to be replaced for the most part by modern tendencies drawn from the West, with which the near and middle East, the home of Islamism and Brahminism, are still out of all sympathy.

Further, the races who dwell in the boundless territories washed by the eastern waters of the Pacific Ocean possess a literature of which hardly the fringe has been touched. A more complete investigation brings every day to light new elements, archæological, historical, and folklorist, tending to show the course of thought and life that has brought these immense and isolated populations into an ordered civilization of a very peculiar kind, upon lines quite other than those which have obtained in the West or in the near and middle East—elements which call for separate treatment and are well worthy of distinct recognition in periodical literature.—Yours truly,

F. Victor Dickins.

6. Vyādhisūtra on the Four Āryasatyas.

Ghent.
April 15th, 1903.

Dear Professor Rhys Davids,—Professor Kern has called attention to the relations between the therapeutic doctrine of the Buddha and Indian medical science. He writes in his "Manual of Buddhism," p. 46: "It is not difficult to see that these four *Satyas* are nothing else but the four cardinal articles of Indian medical science, applied to the spiritual healing of mankind, exactly as in the Yoga doctrine.[1] This connection of the *Āryasatyas* with medical

[1] E.g., in Yogasūtra, ii, 15, comm.: "yathā cikitsāśāstraṃ caturvyūham: rogo, rogahetur, ārogyaṃ, bhaisajyam iti, evam idam api śāstraṃ caturvyūham eva, tadyathā: saṃsāraḥ, saṃsārahetur, mokṣo, mokṣopāya iti . . . ."

science was apparently not unknown to the Buddhists themselves, for in Lal. v., p. 448, we find immediately after the announcement of the discovery of the two formulas the significant words: '*utpanno vaidyarājaḥ pramocakaḥ sarvaduḥkhebhyaḥ . . . ,*' and again, p. 458:

'*cirāture jīvaloke kleśavyādhiprapīḍite |*
vaidyarāṭ tvaṃ samutpannaḥ sarvavyādhipramocakaḥ ||'"

"In a long ailing world of creatures, plagued with the sickness of sins, thou wast born, the prince of physicians, delivering from all sicknesses."

Allusions to the therapeutic omniscience of the Tathāgata are, of course, numerous; some are very persuasive and to the point; for instance, Bodhicaryāvatāra, ii, 55 foll.:

itvaravyādhibhīto 'pi vaidyavākyaṃ na laṅghayet |
. . . . . .
tatra sarvajñavaidyasya sarvaśalyāpahāriṇaḥ |
vākyam ullaṅghayāmīti dhig mām atyantamohitam ||

"Though with but a passing disease to fear, one should not transgress the physician's bidding. Even so, I transgress the bidding of the omniscient physician who draws forth every cause of pain—shame on me for my supreme stupidity!"

And ibid., vii, 22 foll., a comparison between the bodily diseases and the mental ones, between the hard methods of the medical scientists and kind methods of the moral teacher:

sarve 'pi vaidyāḥ kurvanti kriyāduḥkhair arogatām |
tasmād bahūni duḥkhāni hantuṃ ṣoḍhavyam alpakam ||
kriyām imām apy ucitāṃ varavaidyo na dattavān |
madhureṇopacāreṇa cikitsati mahāturān ||
ādau çākādidāne 'pi niyojayati nāyakaḥ |
tat karoti kramāt paścād yat svamāṃsāny api tyajet ||

"There is no physician but cures disease with some pain in the treatment: thus to destroy great pains a little must be borne. This treatment, usual though it be, the Great

Physician has not followed: with pleasurable handling heals he the greatest sufferers. First he engages us, our leader, in the giving of herbs and the like: this does he that in due course afterwards we may renounce even our own flesh."

Moreover, we find in the Abhidharmakośa and in so many words the actual parallel discovered by Professor Kern. At the beginning of the sixth Kośa (MS. of the Société Asiatique) Yaśomitra has the following glosses:—

vyādhiṃ dṛṣṭveti . vyādhir duḥkhasatyasyopamānam ; tannidānaṃ samudayasatyasya ; tatkṣayo nirodhasatyasya ; tadbhaiṣajyaṃ mārgasatyasyopamānam . *sūtre 'py eṣa satyānāṃ dṛṣṭānta* iti. Vyādhisūtre . katham . caturbhir aṅgaiḥ samanvāgato bhiṣak[1] śalyāpahartā rājārhaś ca bhavati rājayogyaś ca rājāṅgatve ca saṃkhyāṃ gacchati . katamaiś caturbhiḥ ? ābādhakuśalo bhavati, ābādhasamutthānakuśalaḥ, ābādhaprahāṇakuśalaḥ, prahīṇasya cābādhasyāyatyām[2] anutpādakuśalaḥ . evam eva caturbhir aṅgaiḥ samanvāgatas tathāgato 'rhan samyaksaṃbuddho 'nuttarabhiṣak śalyāpahartety ucyate. Katamaiś caturbhiḥ ? iha bhikṣavas tathāgato 'rhan samyaksaṃbuddha idam duḥkham āryasatyam iti yathābhūtaṃ prajānāti, ayaṃ duḥkhasamudayaḥ ; ayaṃ duḥkhanirodhaḥ ; iyaṃ duḥkhanirodhagāminī pratipad āryasatyam iti yathābhūtaṃ prajānāti . iti.

I do not know this Vyādhisūtra from other sources. The phraseology is of the best kind. You will observe that, according to this sūtra, the third satya is the way (mārga, upāya) to the destruction of the disease, and the fourth the way to its not-appearing-again (a-punarbhava). The scholastic point of view, so far as I know, is different.[3]— Yours faithfully,

LOUIS DE LA VALLÉE POUSSIN.

[1] MS. (here and *infra*) has: bhisak kalpa°. I suppose that the old Nepalese ligature has been misunderstood by the modern copyist.

[2] MS. has °*syām*.

[3] This attribute of the Buddha helps to explain the origin of the Bhaisajyaguru of the later mythology which Dr. Grünwedel (Myth. B., p. 118) pronounces "noch unerklärbar."—*C. Bendall.*

7. NANJIO'S 1185—BHĀVAVIVEKA.

DEAR PROFESSOR RHYS DAVIDS,—Bunyiu Nanjio's 1185, Pân-zo-tan-lun (Prajñādīpa Śāstra,[1] *Prajñāpradīpaśāstra-kārikā*, or °*vyākhyā*?[2]), is said by the editor to have been "composed by the Bodhisattvas Nāgārjuna and Nirdeśa-prabha (? 'distinct-brightness,' or Piṅgalanetra), the latter explaining 500 verses of the former." That is clear enough. *Nirdeśaprabha* may be a wrong translation of 分別明 (Fan-pieh-miṅ); but *humanum est errare*. The origin of *Piṅgalanetra* alone is perplexing.

But if we glance at the table of Additions (p. xxxv), or the first Appendix (s. nom. *Deva*), we are definitively puzzled: "for *Nirdeśaprabha* (? distinct-brightness, or Piṅgalanetra) read *Nīlanetra* (or Āryadeva)." And again: "*Ārya Deva*, also called Nīlanetra, on account of his having two spots, as large as the eyes, on his cheeks. His real name was *Candrakīrti*."

To make things more obscure, observe that Nanjio's 1179, the *K*uṅ-lun or Madhyamakaçāstra, gives us a Mūla- or Capital-Text by Nāgārjuna, and a ṭīkā by Nīlacakṣus (? 'blue eye,' or Piṅgalanetra). This Nīlacakṣus must again be Candrakīrtī.

The observations of Dr. Takakusu (in J.R.A.S., 1903, p. 181) do not throw much light on the matter.

The Madhyamakaçāstra, or Mūlamadhyamaka, is undoubtedly the collection of the Mādhyamika aphorisms,[3] attributed by Sanskrit, Tibetan, and Chinese tradition to Nāgārjuna.[3]

There is in Nepalese literature and in the Tibetan a Madhyamakavṛtti (Prasannapādā nāma) by Candrakīrtī,

[1] Read *Prajñāpradīpa*. *Prajñā* is of course correct. But I wonder why Nanjio writes *ad* 1179 *Prāṇyamūlaśāstra*; the Tibetan has: Pradzñā nāma mūlamadhyamakakārikā = . . . çes-rab ces-bya-ba.

[2] Incorrect. *Prajñā* is the name of the Nāgārjuna's śāstra (Treatise) of the Nāgārjuna's kārikās (Aphorisms or sūtras). *Prajñāpradīpa* is the name of the *vyākhyā* (Commentary).

[3] According to the colophon of the Tibetan translation of this book, there are 449 aphorisms or ślokas.

which I am now editing for the Bibliotheca Buddhica. It bears no intimate relation either to Nanjio's 1179 or to his 1185.

But there is in the Tanjur, Mdo, xviii, a commentary on the Madhyamakaçāstra, by Bhāvaviveka[1] (*Legs-ldan-hbyed*), entitled *Prajñāpradīpa Mūlamadhyamakavṛtti*. This is exactly the title of the Nanjio's 1185; and novice as I am in Chinese lexicography, it appeared to me that Fan-pieh-miñ could be well translated, not *distinct-brightness*, but *bright-distinctness* (compare the Tibetan *legs-ldan-hbyed* = 'good distinction'); that *viveka* was a better translation of *distinct* than *nirdeśa*; lastly, that Nanjio himself (or his sources?) had translated (Appendix i, No. 14) Tshiñ-pien = 'clear discussion' = Bhāvaviveka.[2]

At my request, my brother Henry de la Vallée Poussin sent me a translation of the beginning of 1185 (being the major part of the introduction); and I received a few days afterwards (by the kindness of my friend Mr. F. W. Thomas) a copy of the commencement of the Tibetan xylograph. The accord was more admirable than I could have ever hoped. All the Mādhyamika treatises have the same phraseology, and all the commentators are given to explaining the subject, the purpose, and the so-called 'relation' of the treatise; but the Chinese (my brother's translation from the Chinese) and the Tibetan *do* agree in details, and the coincidence is complete. I am unable to understand the introductory stanza; but we do not always understand Sanskrit stanzas. The Tibetan lotsavas were more clever than we are; but the Chinese translators were also puzzled by the stylistic and grammatical complications.

Therefore the notice on Nanjio's 1185 must be written as follows: "Text by Nāgārjuna; commentary by Bhāvaviveka

[1] Such is the spelling of Schiefner, Kern, etc. *Bhava*° is not impossible.

[2] We find in the Mahāvyutpatti a third translation of Bhāvaviveka. See Julien's MS. (Bibl. Nationale), § 172, No. 3,310 (= Minaev's edition, § 177. 22). Bhavya = skal-ldan (bhagavant, bhavya; skal-ba-med-pa = abhavya, see Śikṣāsamuccaya, 209. 12) = 有 清 分 = yew-ts'ing-fan = being-clear-distinction = clear distinction of the being. (H. V. P.)

(= Tandjour, Mdo, xviii, foll. 44–299)," and the statement "Deest in Tibetan" must be erased.

As concerns Nīlacakṣus = Āryadeva = Piṅgalanetra, I have nothing to say, except that the commentary in Nanjio 1179 is identical neither with Nāgārjuna's, nor with Buddhapālita's, nor with Candrakīrtī's commentaries on the same book. "A chaque jour suffit sa peine."—Yours faithfully,

L. DE LA VALLÉE POUSSIN.

8. THE BRAHMAJĀLA SUTTANTA IN CHINESE.

DEAR PROFESSOR RHYS DAVIDS,—Referring to my note "Pāli and Sanskrit" (J.R.A.S., 1903, p. 359), Dr. K. Watanebe writes as follows:—"No. 1087 in Nanjio's Cat. is entirely different from No. 554. The former, as you mentioned, belongs to the Mahāyāna class; while the latter is classified as Small Vehicle Sūtra (see Nanjio), and it corresponds with slight differences to the Pāli Brahmajālasutta. There is another Chinese version of this sutta contained in the Chinese Dīghanikāya (Nanjio, 545)."—Yours faithfully,

L. DE LA VALLÉE POUSSIN.

9. KAUŚĀMBĪ, KĀŚAPURA, VAIŚĀLĪ.

Jaunpur.
May 7th, 1903.

DEAR PROFESSOR RHYS DAVIDS,—I have good reasons, which I intend to publish in due course, for believing that the city of Kauśāmbī visited by Yuan Chwang should be identified with Gūrgi (Arch. Surv. Rep., xix, pl. xx; xxi, pl. xxxvi); that Kāśapura, visited by the same pilgrim, is now known as Jhūsī (Mon. Antiq. N.W.P., 138); and that Vaiśālī city was situated in the Chaparā District of Bengal, and is represented by the extensive remains of the undescribed walled city at Mānjhī, on the left bank of the Ghāgharā (Gogrā) river, opposite to the confluence of this river with the old bed of the Ganges.—Yours truly,

W. VOST.

10. The Zodiacal Light.

Sir,—In two very interesting papers in our Journal (J.R.A.S., n.s., x, p. 344, and xii, p. 327) Sir James Redhouse has identified the Zodiacal Light with the "False Dawn" of Oriental poems and lexicons. I venture to question this and to submit that the "false dawn" is nothing but the first or early dawn. This is the view of Lane, Arab. Dict., 1345, col. 3, where he explains the phrase *zanabu-s-sirḥān* (wolf's tail) as the false dawn, i.e. the first dawn, and observes that this nearly agrees with the Greek λυκόφως. I submit that the zodiacal light is a rare phenomenon even in India, and that it is presumably still rarer in Persia, as being further from the equator, and therefore cannot be the false dawn which is represented in the dictionaries quoted by Sir James as a thing of daily occurrence. Thus the Turkish translation of the Qāmūs says, "There are two dawns, one the false dawn . . . . the other shows itself later." During a residence of more than thirty years in Bengal I never, to my knowledge, saw the zodiacal light in the morning, though I once saw it very brilliant in the western sky at Calcutta for two or three evenings. Other Anglo-Indians seem to have been equally unfortunate, and Sir James Redhouse admits in his first paper that it is only observable in one or perhaps two months of the year in the morning, viz. in October and November.

According to Abul Faẓl, as translated by Colonel Jarrett, the Persian for the zodiacal light is *nezak*, a short spear or javelin. In the Āīn Akbarī he speaks of the cosmogony of the Greeks and says, "The elemental spheres are nine in number . . . . The second is of Air . . . . It is here that comets, zodiacal light, luminous streams and meteors, and the like have their origin" (Jarrett, iii, 38). In the original, Bib. Ind., 2nd ed., p. 24, l. 11, the words are

ذوات الاذناب و نیازک و امعده و ذوات القرون و مانندِ آن

Here the plural *neyāzak* is used. Perhaps the true reading of the words that follow it is امدة ذوات القرون, i.e. pillars possessed of horns. At least there is no conjunction in a manuscript copy of the Āīn in my possession. Colonel Jarrett has a note in which he quotes Humboldt as remarking that the term *nezak* was first used by the Persian astronomers with reference to the light observed in 1688, and to which Cassini gave the name of the Zodiacal Light. I may add that *nezak* or its plural *neyāzak* corresponds to the *neza-i-otiṣ̲hīn* of Vullers' Dict., ii, 1387, col. 1, which he renders "radii solis orientis et occidentis," and to the *neza ba kaf* of Steingass. It also corresponds to the *neza ba chast* which Abul Faẓl uses in the Akbarnāma (Bib. Ind., 3rd ed., 222, nine lines from foot) when speaking of the various forms of comets. Possibly one reason why eastern writers have not specially noticed the zodiacal light is because they regarded it as a form of comet. According to Abul Faẓl, Hindus reckoned that there were a thousand astral bodies (Jarrett, id.). In the Akbarnāma, in the place already referred to, which is a long description of comets in general and of Cornelius Gemma's comet of 1577 in particular, he is more moderate and says that the Hindu books describe more than a hundred kinds of comets, but that the Greek treatises mention only seven kinds. He also says (Akbarnāma, iii, 222, second line from foot), "Some Greeks are agreed that hairy comets (*ẕū ẕūāba*) appear in the east at sunrise, and tailed ones (*ẕūẕanab*) in the west at evening, and apparently this is the result of repeated observations." It will be observed that Abul Faẓl is writing in the Āīn of the Greek cosmogony, and that apparently he attributes to them a knowledge of the *neyāzak* or zodiacal light.

In his first paper Sir James Redhouse quotes the Bahār-i-'Ajam as saying that the false dawn is compared to the tail of a wolf "by reason of its length and *slenderness*." But I think Sir James must have taken his quotation from Vullers, i, 900, col. 2, and not verified the reference, for in the lith. ed. of the Bahār-i-'Ajam of the Newal

kishore press, 1894, p. 457, col. 2, s.v. *dum-i-gurg*, the word is not باریکی *bārīkī*, as in Vullers, but تاریکی *tārīkī*, darkness or blackness. It thus corresponds to the *ṣabḥ azraq*, azure, or dark blue, morning of Omar Khayyām, quatrain 200 of Whinfield's ed. and translation, p. 135 of ed. 1901, and which he renders by "cold grey light."

H. Beveridge.

P.S.—Is not the phrase "the false dawn" paralleled by "the doubtful dusk" of "In Memoriam," canto xcv?

11. Notes from the Tanjur.

Dear Professor Rhys Davids,—Nanjio's Catalogue of the Chinese Tripiṭaka makes mention (p. 374) of an author whose name, in Chinese *Wu . siṅ*, 'without nature,' Nanjio conjecturally restores in Sanskrit as *Agotra*. Only one work (No. 1171 (1)) is ascribed to him, namely, a commentary on the *Mahāyānasamparigraha* of Asaṅga. A second commentary, by Vasubandhu, on the same work is included in the volume, and the text itself is recorded under Nos. 1183–4 and 1247.

Asaṅga's work is plainly identical with one contained in the Tanjur (*Mdo*, lvi, foll. 1–47) under the title *Mahāyānasaṃgraha*. This is followed by two commentaries: (1) a *Bhāṣya* by Vasubandhu (foll. 129–212), and (2) a *Mahāyānasaṃgrahopanibandhana* (foll. 212–342) by an Upāsaka Bhadanta *Ṅo . bo . ñid . med*. This is no doubt the person represented by the Chinese *Wu . siṅ*. Wassiliew, in Tāranātha's account of this author (see the Index), renders the Tibetan by *Asvabhāva*, but *Asvarūpa* would be equally possible. *Virūpa*, which is generally not translated, would probably be *gzugs . med* (though *ṅo . bo* sometimes = *rūpa*), and *Abhāva* would be insufficient. — Believe me, yours faithfully,

F. W. Thomas.

12. The Soul-Theory in Buddhism.

I should like to be permitted to comment on the essay in the *Journal Asiatique*, Sept.–Oct., 1902, by Professor de la Vallée Poussin on "Dogmatique bouddhiste." The article, which is of extraordinary interest, is the fruit of untiring labour in untrodden fields, and marks a new departure in the exegesis of Buddhist literature. It is an inquiry whether and how far certain tenets, of cardinal importance according to the Pali Pitakas, appear as elaborated, modified, or otherwise evolved in the Sanskrit sources of Buddhism.

The tenets in question are the negation of *ātman* (Pali, *attā*) or soul, and the acquiescence in the current belief in *karma-phala*, or moral retribution in the after-life. To Western minds the nihilism of the one tenet and the persistent individuality implied in the other form an antinomy or paralogism which implies either muddle-headedness, or sophistry, or esotericism, or all three in early Buddhism. The difficulty of reconciliation was not unnoticed even by original adherents.[1] And Professor Poussin's inquiry turns, as might have been expected, on the nature and function assigned, in both Pali and Sanskrit sources, to that constituent of the Buddhist *moi biologique* (I thank the author for that word!) which might replace the more obviously transcendental *ātman* — to wit, *vijñāna* (Pali *viññāṇa*). The inquiry is of necessity lengthy and discursive, but the erudition of the author has brought together a considerable mass of citations in text[2] and footnotes. These, together with the author's lucid presentments of ideas, should make the essay a guidepost which no one can afford to neglect, but which will, on the contrary, be gratefully consulted.

Professor de la Vallée Poussin finds a very positive evolution of *vijñāna*-theory in certain Sanskrit-Buddhist

[1] M. III, 19; cf. I, 8, 258; S. III, 103. See the present writer on Majjhima Nikāya, J.R.A.S., 1902, p. 480.

[2] On p. 287, for XXVII of Saṃyutta, read XXII.

texts. The term *saṃtāna* is joined to or substituted for it—a term which seems to approximate to our own neo-psychological concept of mind as a 'continuum' or flux. And he infers from certain contexts that this *viññāna-saṃtāna* was regarded, not as one permanent, unchanging, trans-migrating entity, as the soul was in the *ātman*-theory, but as an "essential series of individual and momentary consciousnesses," forming a "procession vivace et autonome." By autonomous he means independent of physical processes. According to this view the upspringing of a new *viññāna* at conception, as the effect of the preceding last *viññāna* of some expiring person, represents no change in kind, but only, to put it so, of degree. The *viññāna* is but a recurring series, not a transferred entity or principle. Hence it is more correct, if less convenient, to speak, not of *viññāna*, but of the *saṃtāna* of *pravṛtti-viññānāni*.

This notion, he holds, gives us a continuous 'I,' responsible yet susceptible of interruptions. And hereby the extremes of negation and affirmation in the early tradition are bridged over; and we get a coherent system, vindicating for Buddhism the claim of its founders to teach a Mean Doctrine (*majjhena dhammaṃ*) between the Eternalism of *sabbaṃ atthi* and the Nihilism of *sabbaṃ natthi*.[1] He concludes that since in place of Soul the Buddhists substituted a protagonist who played the part of soul so uncommonly well, we must put into the background all their reiterated rejection of the Attā.

Now I venture to think that in breaking up the notion of an abstract *viññāna*-entity into a series of intellectual processes or force-moments, Professor Poussin shows true insight into Buddhist thought. Dimly and crudely, without scientific language or instrument, the early Buddhists were groping, under the crust of words, after that view of phenomena which we are tending to make fundamental in our science of to-day. They were feeling out after a dynamic conception of things—after a world-order of becoming, movement, process, sequence, force.

[1] S. II, 17, 20, 23, 61, 76; III, 135: cf. II, 49, bhūtaṃ idan ti Sāriputta passasi?

Heracleitus, with his flux of becoming, had preceded them in a rudimentary fashion. Aristotle, with an inherited tradition of soul as a kind of motion, and with his own theory of soul as informing energy, actualizing the potential, was groping with them. Hume resolved a soul-being, for us, into 'particular' processes. Wundt has done much the same for the "fine old crusted" *Seele* of Germany. Matter itself is melting away as substance.

For the relatively static and material notion of an indivisible soul-monad dwelling in one concrete perishable cage after another, Gotama substituted the idea of a series of wholly transient compounds (*sambhavo*), organisms, personal nexûs, living beings. Living revealed itself as a congeries of manifestations (*pātubhāvo, uppādo*) of becomings and extinctions. Part of the compound was relatively stable, to wit, the body (*rūpa, kāya*); but the rest—and this, *pace* the four other skandhas, virtually amounted to affective reaction or *vedanā*, and intellectual reaction, or *mano, citta*, or *viññāṇa* — was in a state of constant flux, "by day one thing as it arises, another as it wanes." To call this by the name of a substance, conceived as permanent and unchanging, were the last absurdity (S. II, 94–5). And with respect to its destiny, the faithful are forbidden to hold any view "about the coming, going, transmigration, rebirth, growth, development of *viññāṇa* apart from what is hereon taught respecting the other skandhas" (S. III, 53 foll.).

In the Abhidhamma, e.g. the Dhamma-Saṅgaṇi, there appears already a tendency to substitute the plural *viññāṇāni* for the term groups of *viññāṇa* (*cha viññāṇakāyā*) of the Sutta Pitaka. But if the early Buddhists did not find fitting terms for the view they were seeking to realize so ready to hand as Aristotle did, it should be remembered that they had not a body of scientific tradition and terminology, however imperfect, to draw upon as he had.

It is true that they did not guard their position as well as they might have done, had they fully realized its great issues. They used now and again the traditional

animistic expressions as to the 'descent'[1] of *viññāṇa* or *nāmarūpa* into the womb at conception (D. II, 63; S. II, 91, 101); as to laying down this body and taking another (S. IV, 60, 400), and so on. And they incorporated into their canon, with so much other mythical lore, the *Märchen* about Māra seeking the *viññāṇa* of the suicides Godhika and Vakkali (S. I, 122; III, 119–124) — a fanciful, almost humorous legend which even M. Poussin, with all his sense for 'ironie subtile,' takes as seriously as other Paliists have done. Again, they use the conventional phraseology of transmigration in making a person speak of *his* past births and *his* future destiny. But the great mass of sober argument and positive exposition in the Pitakas goes to show both that the Buddhists resolved soul-entity into psychological process, and also that a future personal complex or self like unto, and the effect of, yet not identical with the present self, would reap the Karma harvest sown here.

When, however, M. Poussin defines what he thinks is meant by the *saṃtāna* of *pravṛtti-vijñānas*, it seems to me that he draws, from the later sources he quotes, implications very heavy for them to bear. He finds the psychology of the Nikāyas superseded by a metaphysical hypothesis of Sanskrit commentators. He will not admit that this flux of *vijñānas* is "the sequence of states of mind caused by the casual impact of sense and object" (the Nikāya doctrine). No, it is an autonomous continuum of *vijñāna*-moments: "leur série essentielle, leur procession vivace et autonome." These are his own words. But the quotations he supplies hardly bear him out in this metaphysical elaboration of *viññāṇa*-psychology. He does not claim that this hypothesis exists in the Nikāyas. They indeed affirm of *viññāṇa* the merely phenomenal nature which he transcends. Far from being autonomous, *viññāṇa*, for them, *is not*, does not arise (*uppajjati*), unless there is contact by way of sense or

[1] This term is used in Saṃy. III, 46, to mean simply the 'arising' in consciousness of certain feelings or of ideas about them:—pañcannaṃ indriyānaṃ avakkanti hoti.

image (see e.g. M. I, 258–9). And I have not yet traced the *saṃtāna*-hypothesis in the traditions of the southern scholasticism, although *pavatta* for psychological process is a favourite term with Buddhaghosa.

It is easy to call *vijñāna* a protagonist of the *ātman* when it has been elaborated into a hypothetical quasi-noumenal continuum of self-induced flashpoints of consciousness. I am not denying that this heterodox elaboration came to pass. On such a dynamic ego further light will be most welcome. But, however strongly its place in Indian thought becomes substantiated, it cannot dwarf the significance, as M. Poussin suggests it can, of Gotama's original position with respect to soul.

The rejection of *attā* was based, it is true, on a logical interpretation of individual experience and consistency of terms. But its import was, in fact, profoundly ethical and social. Gotama was making a stand against priests and gods and sacrificial ritual. And where soul was believed in, there Oversouls and the claims of the soul's 'medicine-man' could not be kept out. That belief he undermined by breaking up the notion of the person as consisting of two distinct homogeneous substances, and by resolving him into a number of impermanent elements and activities—activities that were only potential till called into temporary actuality by natural law-governed antecedent causes. The path he hewed was inevitably rough and ill guarded. It was the work of a great pioneer.

C. A. F. Rhys Davids.

NOTICES OF BOOKS.

BALHVAR I IODASAPH. Gruzinski tekst po rukopisam xi–xii vv. (s'prilozheniem dvukh paleographicheskikh tablits), s'perevodom i predisloviem izdal A. KHAKHANOV.

[BALHVAR AND IODASAPH. The Georgian text according to MSS. of the eleventh and twelfth centuries, to which are added two palæographic plates. Edited by A. KHAKHANOV, with a translation and preface.]

Lazarevski Institute, Moscow, 1902.

An accurate account was given of the Georgian and Armenian versions of the Barlaam and Josaphat legend in the Transactions of the Folklore Society, June, 1896, by Mr. F. C. Conybeare, of Oxford. The Georgian text which he used was that published by Professor Marr, of St. Petersburg. In 1901, however, two fragments of manuscripts were discovered in the Tiflis Church Museum. These fragments Professor Khakhanov here edits and assigns to the eleventh and twelfth centuries. He is induced by the style of writing to give them this date. They are in the *khutsuri* or ecclesiastical character, but a postscript is added in the *mkhedruli* or civil character, and the palæographic peculiarities point to a time when the *mkhedruli* began to be developed out of the *khutsuri*. This period Professor Khakhanov fixes about the eleventh or twelfth centuries. The reader will observe the forms Balhvar and Iodasaph for Barlaam and Josaphat, but these are common variations in Georgian.

By means of these manuscripts a more correct text can be established. Those known before were very late, as indeed is that used by Professor Marr, although copied from an older manuscript. Professor Khakhanov shows that these fragments make many obscure passages clear. In the previously cited article by Mr. Conybeare he rightly insists upon the importance of the Georgian version of this curious legend, which more closely resembles the Arabic and Hebrew recensions. Professor Khakhanov gives the Georgian text and a Russian translation. Two photographic plates of the fragments are added. He has done a real service in presenting these versions to the student of the strange Christian redaction of the life and spiritual development of Buddha.

W. R. MORFILL.

THE HISTORIES OF RABBAN HÔRMÎZD THE PERSIAN AND RABBAN BAR-'IDTÂ. Vol. I, Syriac Texts; Vol. II, pts. 1 and 2, English Translations. By E. A. W. BUDGE, M.A., Litt.D., D.Lit. (Luzac & Co., 1902.)

Dr. Budge's edition of the lives of the Nestorian saints Rabban Hôrmîzd and Bar-'Idtâ illustrates a familiar branch of the literature of the Syrians which loves to tell of the piety and miraculous deeds of the ascetes and anchorites of bygone days. Much of it has been destroyed by religious opponents or has otherwise disappeared, but the survivals are not a few, and if they are not altogether of absorbing interest when judged by present-day standards, they faithfully reflect the life and thought of the times in which they were written, afford now and again valuable ecclesiastical information, and not unfrequently contain useful details regarding ancient Syrian history and geography.

The heroes whose achievements are here presented in three sumptuous volumes flourished in the seventh century of the Christian era. Both were founders of monasteries,

and have enjoyed a great and lasting reputation in the Syrian Church. It is not unnatural that there is much in these books that appeals only to the few students who are interested in Syriac philology or ecclesiastical history—more precisely, in the dealings between the rival sects of Nestorians and Jacobites, but a careful perusal will reveal many a quaint touch of human nature, and disclose the existence of a firm belief in magic and magical practices which the teaching of the Christian Church had been unable to destroy. You shall find the Holy Rabban Hôrmîzd performing miracles by a magical lotion consisting of the water in which the cross that hung around his neck had been washed. Then there is the *ḥĕnânâ*, the dust taken from some place which is sacred to the martyrdom of a saint, or has holy virtue by reason of its coming from the cave in which some pious ascete lived. Sometimes, again, the sacred dust (*ḥĕnânâ*) and the holy lotion (*shĕyâgtâ*) are mingled together. By such magical aids signs and wonders were accomplished, and the possession of a sample of one or other of these was a "heavenly gift" which bestowed protection and immunity upon its possessor.[1] Attention may also be called to the sacramental meal of bread and wine (vol. ii, pt. 1, pp. 109 sq.), and to the transference of evil by means of a veil (pp. 246 sqq.).

In the metrical life of Bar-'Idtâ the author tells us how he was requested to write a short account of the saint as the existing biography was too long to be read conveniently at the commemoration service. The result is a poem of 2,036 lines. Among other details of interest may be mentioned the list of works studied by the holy man when a novice, which he committed to memory with such thoroughness that "at length," he boasts, "not even in one verse did I substitute a γάρ for a δέ." There is a touch of humour, too, in the account of the frequent interviews of the novice and the Father:—

[1] Students of folklore will at once recall analogies. For a parallel, from the Yezîdî's, see the *Jewish Quarterly Review*, April, 1902, p. 431. Excerpts containing the recipes for the preparation of the *ḥĕnânâ* and *shĕyâgtâ* are given by Professor Wright in the Cambridge *Catalogue of Syriac MSS.*, pp. 344 sqq.

"Whensoever he came to me, and whensoever I went to him,
He would take my ear, and pinch it, and say to me, smiling:
'Hast thou filled the Euphratean air with the words of the repetition of the Scriptures?
Hast thou filled the Euphratean air with the words of the Spiritual Books?'"

The metrical life of Rabban Hôrmîzd is a wearisome production by Mâr Sergius of Adhôrbaijân, the Syriac original of which was edited by Dr. Budge in 1894. It appears to be based upon the prose life, and is of no literary value, although it is of some interest philologically on account of the numerous invented grammatical forms and the uncommon words and phrases which the writer has employed. Dr. Budge's translation is given in the second of the two volumes of English translations.

The Syriac text of the prose life of Hôrmîzd is from a copy made for Dr. Budge in 1892 by the deacon Îsâ bar-Isha'yâ of Alkosh[1] from a comparatively modern copy which appears to have been written somewhere in the last century. This, in its turn, was taken from a MS. which is said to have been of the twelfth or thirteenth century; unfortunately it disappeared at the death of its possessor and could not be traced. This is the more regrettable as the Cambridge University Library possesses two *dated* MSS. of this identical work, which agree in presenting a decidedly superior text. The MSS. in question are Add. 2002 (dated A.D. 1669) and Add. 2020 (A.D. 1697),[2] and are among those originally collected for the Society for Promoting Christian Knowledge by the Rev. Percy Badger in the course of a missionary journey through Mesopotamia and Kurdistan in 1842–4.[3] Generally speaking, C.[a] and C.[b] agree against B.

[1] See the usual laudatory colophon on pp. 109 and 202 of the Syriac text. The same scribe wrote the Cambridge Add. 2811 (dated 1883).

[2] To be referred to as C.[a] and C.[b] respectively (and as C. where they agree). B. = the text printed by Dr. Budge (S.T. Syriac text, E.T. English translation).

[3] Whether these two MSS. were actually acquired by Badger at Alkosh is not known.

Thus, Budge's correction on E.T., p. 31, appears in both MSS., but that on p. 32 is only found in C.[a] The allusion to the "stone which was laid in Jerusalem" (E.T., p. 80; cf. Matt. xxi, 44, Luke xx, 18) is obviously incomplete in B., and C.'s reading is doubtless original: "R. Hôrmîzd was like the stone that upon whomsoever it fell it would crush him, and whosoever fell upon it was broken in pieces." On S.T., p. 62, l. 2 sq., for ܕܢܦܠ ܥܠܝܗ ܕܟܠܐ one expects ܕܢܦܠ ܥܠ ܕܟܠܐ; C.'s ܕܢܦܠ ܥܠܝܗ is simpler and preferable. On E.T., p. 92, l. 10 sq., there is an obvious error, and the translation "he slew both herself and her little son" can scarcely be forced out of the Syriac. The context makes it clear that the child was not killed, and C. quite correctly adds "he hath left" (ܫܒܩ). The difficult reading on E.T., p. 112, had already perplexed Dr. Budge (see his note), but all difficulty is removed by C.: "the laying waste (or 'destruction') of Zion the crucifier hath drawn nigh"; the epithet originally applied to Jerusalem is here used of the wicked and heretical monks of Bezkîn.[1] In the case of the words of Satan (E.T., p. 27), it is to be observed that C.[a] reads: "thinkest thou, O follower of Nimrod,[2] that thou hast vanquished me?"; whereas C.[b] agrees with B., and has the words in the third person. In E.T., p. 82 (l. 5 from end), it requires considerable ingenuity to extract the rendering "rubbed his eyes" (ܥܓܪ, properly to grind, rub small, of corn); C. reads "open" (ܦܬܚ).

A noteworthy characteristic of the Cambridge MSS. is the fact that they frequently present a shorter, less laboured, less involved, and more syntactical text. In many cases where it is almost impossible to extract a satisfactory translation

[1] It may be added that Budge's emendation on p. 126 is so far supported by C. that these agree in reading ܕܡܬܩܛܠܝܢ, a plural form, which, however, does not seem to be supported by the lexicons.

[2] The word is gentilic, "man of Nimrod"; hardly, as Budge suggests, "a rebellious one," but a synonym for "Persian"; cf. Nöldeke's note in *Z.D.M.G.*, xxviii, p. 279, n. 1. R. Hôrmîzd is elsewhere called a Persian, or son of Persians, e.g. E.T., pp. 124, 153 sq.

from B., C. provides a simpler text, and from the examples which follow I think it may safely be inferred that the present overladen state of B. is not original, but may in all probability be attributed to a later editor. So far as I have observed (from a collation of typical passages) the omissions in C. never cause any lack of continuity.

The curious expression "a Gihon in intelligence" (p. 23) is wanting in C., as also is the rest of the sentence after "aged men" (ibid.). In the anecdote on S.T., p. 37 (E.T., p. 56 sq.), C.ª reads the less expanded: ܐܠܐ ܠܚܣܘܗܝ ܕܢܥܒܕ ܗܕܐ; further, ܘܟܕ ܢܩܫ ܠܬܪܝܢ ܡܪܡܝܬܐ ܒܠܒܝܢܘܬܐ ܢܦܠ ܢܩܘܫܐ.[1] More striking is C.'s version of the involved passage on E.T., p. 14: "there began to stir in him the motions of the fear of God, and thus was he always saying to his parents."[2] Again, on E.T., p. 80, C. omits the words, "and a tribulation . . . . heresy"; for "heretics" it has "Jacobites," reading ܒܗܘ ܐܒܐ ܐܪܥܡ ܡܥܩܘܒܝܐ ܐܝܬ ܗܘܐ ܒܗ, followed by ܘܡܢ ܒܬܪ ܐܒܐ ܠܐ ܣܓܝܐ (contrast S.T., p. 54, l. 10). The spelling ܒܝܬ ܢܘܗܕܪܐ may also be noticed. Another difficult passage is E.T., p. 90 (head), which appears in C. in the following form (contrast S.T., p. 60, l. 6 from foot): ܘܣܘܟܐ ܒܝܠܘܬܗ ܕܪܒܢ . ܐܠܐ ܡܛܠ ܕܡܛܐ ܩܪܐ ܕܐܒܕܢܘܢ ܠܐ ܥܠܝܘ ܘܬܟܘ ܡܢ ܒܝܫܘܬܗܘܢ ܕܥܡܗ ܕܪܒܢ . ܘܥ. The reading ܘܬܟܘ (B. ܘܬܟܘ) finds an exact parallel in Julianos (ed. Hoffmann), p. 39, l. 12. There is, further, an extremely obscure account of Marcion's heresy, E.T., p. 121 (S.T., p. 82), out of which, as it stands, it seems impossible to extract any sense. According to C., however, we are told

[1] The reading "go up and beat the board" (S.T., p. 38, l. 4, ܕܢܣܩ ܘܢܩܘܫ) is probably to be preferred to ܕܢܣܩ ܘ, "take [the hammer] and beat," etc.

[2] The translation, here and elsewhere, is adapted to Dr. Budge's. The second note on p. 14 of the English is unintelligible as it stands.

simply that Marcion taught men to place upon their sacrificial altars "idols like this one, that they might be to them saviours and deliverers from those *who are called* dog-devils (*ḳantrôpê*), so that they might not have dominion over them in the month of February, and would drive them (?) *from their churches* through the harmful erring of rebellious demons." The passage, though less involved than in B., is still not clear; the meaning appears to be that through the help of these idols, which the writer characterizes as "a harmful erring of rebellious demons," the dog-devils were expelled from the churches. Of the readings ܡܢ ܥܕܬܗܘܢ for ܡܢ ܥܘܬܪܗܘܢ, ܘܢܛܪܕܘܢ for ܘܢܛܠܩܘܢ, and ܕܡܬܩܪܝܢ for ܕܡܬܬܘܕܝܢ,[1] the first and last at all events bear the stamp of originality.

To these examples, selected from various portions of the text, I may append some of the more important results of a collation of the last few pages (S.T., pp. 93 sqq.): p. 93_6 om. ܘܐܢ ܠܐ ܡܢܐ ܡܢ; l. 10 sq., ܕܡܛܠܬܗ ܫܒܠܘܗܝ ܪ̈ ܫ̈ ܘܕܢܬ ܡܢ ܕܝܘ̈ܐ; p. 94, l. 6 from end, ܘܟܗ . ܘܥܕܡܐ ܠܝܘܡܢܐ ܐܬܓܡܪܘ ܘܐܫܬܡܠܝܘ ܝܘܡܘ̈ܗܝ ܘܕܩܪܒ ܗܘܐ ܫܘܢܝܗ ܠܘܬ ܡܪܢ ܝܫܘܥ ܡܫܝܚܐ ܘܗܕܐ ܒܝܘܡܢܘܬܐ ܡܫܡܠܝܬܐ. B.'s ܐܬܓܡܪ ("had trafficked," E.T., p. 141) is therefore a mere corruption of ܐܬܓܡܪ ("had been made complete"). P. 95_9, ܡܢܝܚ ܗܘܐ ܠܗ; l. 10 sq., ܘܐܝܬ *ܐܡܬܝ ܕܢܒܝܘ̈ܬܐ ܡܠܟ ܗܘܐ ܠܗ ܘܐܝܬ *ܐܡܬܝ ܕܡܛܒ ܗܘܐ ܠܗ ܩܕܡ ܣܓܝ̈ܐܐ ܕܗܢܐ ܐܓܢܛܝܘܣ ܩܕ ܗܘ (the words within the asterisks are omitted by C.[b]); l. 12, ܕܚܝ̈ܠܐ ܐܠܗ̈ܝܐ ܣܥܪ; l. 6 from end, ܛܪܛܝܢܘܢ; ult. ܡܢܐ ܗܝ ܕܐܗܡܝܢ ܒܝ ܘܐܢܬ ܛܥܝܬ ܠܝ ܒܡܬܢܫܝܢܘܬܐ;

[1] There is, accordingly, no need for Dr. Budge's emendation ܕܡܬܕܝܘܢܝܢ. The corruption has arisen, of course, from ܕܡܬܘܕܝܢ = ܕܡܬܩܪܝܢ.

p. 96_1 sq., ܐܝܟ ܐܢܬ ܡܫܟܚ ܒܝܬ ܡܬܝ ; B.'s "why do the congregations resist?" (ܡܢܐ ܡܬܥܩܒ) makes no sense. A few lines further, that Ignatius should order the devil to the house of Mattai and then go himself, is an evident error, which is removed by C. The devils words are: ܐܢܐ ܐܙܠ ܠܒܝܬ ܡܬܝ ܘܐܝܬܝ ,[1] and Ignatius answers, "Yea," to which the devil replies: "get thee unto the house of your Mattai and bring (ܐܝܬܝ) some of the oil," etc. (contrast B.'s "I have [left] a little of the oil"). Ibid., l. 6 from end, ܐܝܟ ܕܐܢ ܐܙܠ ; p. 97 ult., 98_1, ܒܪ ܡܫܝܚܐ ; p. 98_2, ܐܙܠ. Ibid., l. 3, ܐܬܥܒܕ (B. ܐܬܥܒܕ) ; the same word is, perhaps, to be read for ܐܬܥܒܕ (l. 4), where Budge renders "they fashioned." There is no title to the twenty-third chapter; C. runs on with: "and inasmuch as he was a friend of his, his servants . . . . and the governor commanded that he should quickly go into his presence." L. 8 from end, ܒܝܬ ܗܘܐ ; l. 3 from end, ܒܝ ܕܐܬܝ ܠܐܓܪܐ ܕܐܬܝ ; p. 99_{11}, ܪܓܠܝ ("footmen") ; l. 4 from end, ܐܝܟ ܕܐܬ ; p. 100_6, ܐܬܝ ܒܝ . ܐܬܝ ; l. 9 from end, ܐܬܝ (B. ܐܬܝ) ; p. 101_7, ܐܬܝ ("prepared him," hardly "invited him," as E.T., p. 150_4) ; l. 9 from end, C. omits the sitting at the right hand of the governor (the detail has possibly been suggested by p. 98_{12}, the governor and Ignatius). P. 102_{13}, ܒܝ ܫܠܝܡ, surely correct, the magic circle (cf. E.T., p. 223, l. 862) is

[1] "I entreat thee to examine thyself a little" (E.T., p. 143, l. 80 sq.) is incorrect. The meaning is probably, "Do you wish to gain some idea [as to why I have not appeared?" etc.]. B.'s ܐܙܠ is perhaps to be preferred.

impossible, B.'s "bitter (ܡܪܝܪܬܐ) circle" is perhaps a scribe's error; p. 102, l. 3 from end, ܘܢܬܚܫܒܘ, rightly; p. 103_1 sq., ܐܦ ܟܐܢܘܬܐ ܫܬܝܩܐ ܗܘܬ ܘܫܠܝܐ ܗܘܐ ܕܐܬܬܚܫܒܬ ܠܐ ܫܠܝܐ ܘܠܐ ܫܬܝܩܐ; l. 9, ܪܚܡܐ ܥܠ ܥܒܕܝܗ; l. 14, ܠܫܘ ܕܢܫܪܘܢܝܗܘܢ; l. 8 from end, ܘܡܩܒܪܘܗ; ibid., l. 7 from end, C. reads, ܐܝܟ ܕܥܒܕ ܐܪܝܢܐ ܒܦܓܪܗ ܕܐܪܝܘܣ ܠܝܬܐ ܟܕ ܡܚܝܗܘܢ ܪܡܙܐ ܫܡܝܢܐ ܒܓܙܪܐ ܕܝܢܐ ܗܘ ܐܠܗܝܐ ܠܐ ܐܬܚܙܝܘ ܐܪܝܢܐ ܕܢܩܒܪܘܢܝܗܘܢ; p. 104_7, ܢܨܚܢܐ ܕܠܐ ܡܬܡܠܠܝܢ. Finally, p. 107_3, ܒܝܘܡ ܣܒܪܬܐ ܕܐ ܕܩ. ܕܥܘܢܝܬܗ ܡܢ ܒܬܪ ܩܒܘܪܬܟ. The age of R. Hôrmîzd is given as 87 in C., the number of years spent in the monastery of M. Abraham of Rîshâ 7, and in his own monastery 21 (contrast E.T., p. 185).[1]

The above examples are sufficient to illustrate the characteristics of the two Cambridge MSS., which, as I have said, are of the seventeenth century, and until safer evidence is forthcoming it may legitimately be doubted whether Dr. Budge's text really represents a text four or five hundred years older. The corruptions might very naturally be explained by the fact that his text is a copy of a copy of this unknown MS., but the numerous instances of addition and elaboration which it contains are probably to be explained otherwise. That the three MSS. go back to one recension need not be questioned, and one is tempted to suggest that B. has been worked over and highly elaborated by a pious follower of the Nestorian saint. However grateful Syriac scholars must be to Dr. Budge for what he has been willing to give them, the fact remains that his is not a critical edition, and that for text-critical purposes and for the elucidation of the most obscure passages the Cambridge MSS. must be consulted. It is indeed a thousand pities that Dr. Budge was unable to utilize them for purposes of collation, and appears to be quite unaware of their very

[1] In the account translated by Hoffmann, Hôrmîzd spends seven years at Rîshâ and 22 in his own monastery, and the total is 87.

existence—an unfortunate oversight which can only be due to the circumstance that they were not made known to the wider circle of Syriac scholars until the publication of the Cambridge *Catalogue* in the Autumn of 1901.

The translation as a whole is extremely readable, although one recognizes the difficulty which Dr. Budge evidently felt of making a smooth and accurate rendering of a text which proves to be overladen with glosses and additions. In not a few cases better renderings easily suggest themselves. On p. 72, l. 3 from end, and p. 98, l. 4, familiar Syriac idioms are translated literally, but in the latter passage it is conceivable that the ordinary reader will not realize that when the physicians "cut off his hope" they really "lost hope of him." On p. 152, l. 6, "his mercy rolled down" should be (literally) "his compassion was kindled"; two distinct verbs have been confused. On p. 82, l. 3 sq., another well-known idiom has gone astray. The bereaved parents were not so iniquitous as to begin "to curse and to swear" at the men who proposed to bury their dead son by the roadside; they merely "took an oath upon themselves"; the Syriac is analogous to Acts xxiii, 21, *not* Mark xiv, 71. On p. 76 (l. 4 sq.) for "no mad dog shall gird at thee (*sic*)" (ܢܗܠܟ), the preferable rendering is " . . . . shall go about (in the district where thy name is venerated)." "Fall into great heaviness" (p. 145, l. 15) smacks of Hebrew and Assyrian; ܐܬܟܒܕ is best translated "became enraged." On p. 148, l. 10, the throne simply shone — not "emitted sparks." "Evoked" (p. 150, l. 3 from end) for ܐܡܝܢ is ingenious, but ungrammatical as the Syriac text (p. 101, l. 3 from end) now stands; it should naturally be "resounding, making a sound" (ܐܡܝܢ).[1] P. 151, l. 15 sq., for "the wheels of the course of his sorcery had become useless," better "his wheels ceased the course of his sorcery." P. 152, l. 14, not "devouring jaws" (ܒܠܘܥܐ), but "fish-hook," the very

[1] ܘܥܕ in the same line is probably an error for ܘܒܕ.

meaning supported by the gloss. P. 170, l. 97, second half, better, "acquire a knowledge of music." P. 173, l. 145, "from one Sabbath to another." It is not intelligible, too, why Mar Elias the Twelfth (as in the Syriac) is called the Thirteenth on pp. 160, 304; curiously enough, we meet with the same discrepancy in the author's *Book of Governors*, ii, p. 194. On p. 12, n. 3, it might have been helpful to the ordinary reader to mention that the Syriac has simply reproduced the Peshitta rendering of Ramathaim-Zophim (1 Sam. i, 1), which interprets "R. of the watchmen." One misses, too, references to Hoffmann's annotated translation of a metrical history of Rabban Hôrmîzd in his ever invaluable *Auszüge aus syrischen Akten*, pp. 19 sqq. (Leipzig, 1880).

These three volumes are got up with that taste and finish which characterize "Luzac's Semitic Series." The printing is excellent, particularly the Syriac type. To the *errata* in the Syriac volume there may be added: p. 70, l. 8 from foot, ܟ̈ܣܛܝܢܐ *for* ܢܣܛܘܪ̈ܝܢܐ (see E.T., p. 104), and p. 113, l. 16, ܪܘܚܩܘܕܫܐ. On p. 135, l. 545 should be l. 544; in consequence of this oversight there is a discrepancy in the enumeration throughout the rest of the poem. In the English translation (vol. ii, pt. i): p. xiv, l. 14, *read* Tûmârṣâ *for* Jomarṣâ; p. xxxiii, l. 10 from end, *for* latter *read* former; p. 94, l. 10, *prefix* it *before* is. On p. 175, ll. 169, 177, some printer's errors remain uncorrected. P. 147, l. 4 from end, insert the governor's name "Uḳbe"; p. 150, l. 11, some words have dropped out from the translation; p. 291, l. 1848 (S.T., p. 193, l. 1849), insert "not" before "being found in another."

S. A. Cook.

Indo-Iranian Phonology. By Louis H. Gray, Ph.D. (New York: Columbia University Press, 1902.)

Dr. Gray's work is a valuable contribution to the comparative phonology of the Indian and Iranian groups of languages, and illustrates very fully the parallel development of the modern languages in both groups, and of the middle

period which leads up to them, represented in India by the Prākrits and in Persia by Pahlavi.

The examples are gathered under each sound in the following order:—

I. Vowels.
II. Single Consonants.
III. Consonant-groups.

Under each heading the Indian examples are first given under *a* and the Iranian under *b*, a system which renders comparison easy, and one which has not been attempted before. It may be doubted whether the number of words given is not in some cases excessive, for a large number of examples do not illustrate the particular change in question, but cases in which it does not apply, and sometimes these are in the majority. This inevitably leads to a great deal of repetition, as the same word must occur under several headings; and when a certain change is very rare it leads to confusion to give a number of examples which do not illustrate it.

For instance, in § 283 (change of *n* to *v*) eleven words are given, of which only two, both from Kurdish, illustrate this change, and nine show the preservation of *n*. In § 284*b* (syncope of *n* in Iranian) only six words show the loss of *n*, and the other fourteen its preservation. Similarly, in § 364 (*v* = *v*), § 367 (*v* > *g*), § 369 (*v* > *gv*), and § 372 (*v* > *b*) many examples are repeated, and it would perhaps be a gain if these were grouped together so as to show under each head the cases in which the particular change or preservation occurs, and not those in which it is absent. A similar occurrence will be observed in § 56 and § 61, illustrating the preservation of *ū* or its change to *ī*. The Balochi *dīr* for *dūr* might be added to the examples under this head, and its frequent occurrence in Pashto dialects noted.

Although, however, the system pursued leads to a redundance in some cases, I do not wish to be understood to mean that the wealth of illustration is a drawback. On the contrary, it is of the greatest value. Almost every possible

change or modification is dealt with. I would suggest that after § 904 (*sv* through Iranian x^v, *hv* to *v*) another paragraph might have been inserted illustrating the further change of the same sound to *gw* (or *gv* in the system followed by Dr. Gray), as in the case of original *v*. I can only give one example of this change, N. Bal. *gwahār*, 'sister,' which cannot be otherwise explained. The word itself will be found among the examples under § 8*b*. While on the subject of Balochi I may note that the sound *hw* (*hv*) in North Balochi (as in *hward*, 'food,' *hwāδ*, 'salt') does not seem to be recognized here.

The system of transliteration followed is, with slight modifications, that generally adopted in German works on philology. A weak point in this system seems to be the treatment of the letter *v*. No attempt seems to be made to discriminate between the sounds of *v* and *w* (as pronounced in English) and the intermediate sound of purely labial *v* (without contact of the teeth). Now I believe I am right in saying that both in Indian and Iranian languages the sounds of *w* and of labial *v* are the ordinary sounds, while the common European *v* (German *w*), with dental contact, is very unusual. It may be asserted as a general rule, for instance, that *w* is the prevalent sound in Hindī and *v* (labial) in Panjābī and Sindhī. But no hint of this is to be found in most philological writers. I would suggest that in works like the present, intended mainly for American and English students, the letter *w* should be used for its English sound, and *v* for the labial *v* (and also for the dental *v* if it is found).

Western Panjābī, forming as it does a link between Sindhī and Kashmīrī, might perhaps have with advantage been included among the languages illustrated. It affords some interesting examples of syncope in dentals, such as *paī*, 'husband' (Skt. *pati*), *naī*, 'river' (Skt. *nadī*), the latter being the only case of the preservation of the Prākrit form of this word in a modern language.

Among the examples of the rare change $ṛ > ir$ (§ 70) the following might be inserted:—

Panjābī: *tirnī*, 'grazing tax' (Skt. *tṛn*, 'grass').
Hindī: *kirpā*, 'mercy' (Skt. *kṛpa*).

As a rule the words quoted are very correctly given, but some small errors are inevitable in a work of such a comprehensive nature. In most cases they are evidently due to Dr. Gray's authorities rather than to himself. The following may be noted:—

§ 65. For Hindī *unīs*, 'nineteen,' read *unnīs*.
§ 74. For N. Bal. *phut*, 'back,' read *phušt*.
§ 99 and elsewhere. For Afg. (Pashto) *γvaiγ*, 'ear,' read *γvag* or *γvaž*.
§ 254. For N. Bal. *phād*, *phāz*, 'foot,' read *phāδ*.
§ 906. For N. Bal. *hed*, 'sweat,' read *heδ*.

In other N. Bal. words the sounds of *δ* and *θ* are sometimes given with alternate forms *z* and *s*. This is a mistake owing to the words having been written down by foreigners, natives of India, who could not pronounce these sounds. It is equivalent to the similar mispronunciations of English *th* as *s* and *z*, or of Arabic *θ* (ث) as *s* in Persian and Urdū.

It is hardly necessary to observe that these minor corrections in small points do not affect the estimate of Dr. Gray's work as a whole. It is admirably conceived and carried out, and will prove of the greatest value to all students of the history of sounds.

M. Longworth Dames.

Satvotpatti Viniscaya and Nirvāna Vibhāga. By M. Dharmaratna. pp. xli and 66. (Colombo, *Observer* Office; London, Luzac & Co., 1902.)

These are two essays, in English, with elaborate introductions, in German, by Professor Bastian. The first is on the birth and existence of beings in general; the second is on the nature of Nirvāna.

It appears from the German introduction that Professor Bastian, during a visit to Colombo in 1898, was informed

of the existence of these essays in Sinhalese, and arranged to have them translated into English by the very competent hand of Mr. H. M. Gunesekara, the Assistant Librarian at the Museum in Colombo. The MS. of this translation was sent, after a long delay, to Berlin; and was then (during a holiday visit to the island) taken back by Professor Bastian to Ceylon, where it was much revised in conversation with scholars there. Finally, it was printed, with the German introductions, in the island. It is interesting to find an essay in German, on Buddhist metaphysics, set up so accurately by Ceylon printers. And the whole story of the origin of this little book is a most curious example of that interplay of diverse thoughts and nationalities and languages so characteristic of our times. Essays written in the Aryan dialect spoken in Ceylon, and by a Sinhalese, to expound his view of certain abstruse problems started two thousand five hundred years ago by a rajput thinker born in Nepal; that view based on the scholastic interpretations, expressed in diverse tongues, by scholars in Burma, Siam, and Ceylon; and now put before Western scholars in English, but in English written by another Sinhalese, and elucidated (if the word be allowed of Professor Bastian's well-known involved and parenthetical style) by a German professor, in German.

As to the contents of the essays, both those by the author and those by Professor Bastian, no attempt is made to expound the doctrine of the canonical books as such. The authorities referred to are for the most part of much younger date; and the whole exposition is based on the mediæval scholastics.

Neither the original author nor the editor give chapter and verse for any of their authorities; and it is not possible to distinguish their individual opinions from those of the authorities to whom they refer. The style throughout is very confused and difficult, and it is by no means easy to follow the arguments set forth. But in Mr. Gunesekara's renderings of the terms of Buddhist mysticism there is much that is suggestive; and this short pamphlet is of

importance for any scholar who is engaged on the study of the later phases of Buddhist speculation.

T. W. RHYS DAVIDS.

ÇIKSHĀSAMUCCAYA. A Compendium of Buddhistic teaching compiled by ÇĀNTIDEVA, chiefly from earlier Mahāyāna sūtras. Edited by CECIL BENDALL, M.A. (St. Petersburg, 1902.)

Çāntideva's Çikshāsamuccaya is an anthology of Buddhist literature according to the Mahāyāna school, written towards the end of the eighth century A.D. The framework of the book is formed by 27 kārikās or memorial verses, on which the author writes a commentary. Professor Bendall has printed the 27 kārikās separately at the end of his introduction, and has added to each of them the Tibetan as well as the English translation. We learn from the introduction (p. ii) that the kārikās themselves are not altogether original, but that they acknowledge their dependence on earlier literature.

In § 4 the editor gives us his views about the language of the Çikshāsamuccaya, in which he comes to the conclusion that Childers was wrong when he asserted in his Pāli Dictionary (p. 536) that the Northern Buddhists were often misled by their ignorance of Pāli. He dwells especially on the word *phāsuṃ*, which is found (p. 129, l. 8) side by side with *sukhaṃ*, and seems to be put in for its pleasant archaic ring to the ears of the faithful. Another word which might be mentioned in this connection is *lūha*, p. 128, 16 and 131, 4. Bendall says in the note on p. 128 that *lūha* cannot be = *rūksha*, because the two occur together on p. 131. The case is, however, exactly the same as with regard to *sukhaṃ* and *phāsuṃ*, and what holds good in the one must also hold good in the other. *Lūha* is the opposite of *praṇīta*, 'sweet, nice,' on p. 128, so it must mean 'rough, nasty,' and not 'scanty' as Bendall would make out. The corresponding word in Pāli is *lūkha* with the same meaning Majjh. i, 78, where Neumann translates it by 'Rauhsinn.' Cf. Pischel, Grammatik der Prākrit-sprachen, p. 179.

The edition of the Çikshāsamuccaya is founded on a unique manuscript of the Cambridge University Library written in the fourteenth or fifteenth century. Professor Bendall has taken great trouble to give us a correct text, and in all difficult passages he has used the Tibetan version in the Tanjur and also the Chinese version, with which he became acquainted through Professor Leumann and his Japanese pupil Wogihara. Copious notes accompany the text from beginning to end, and give us valuable information taken principally from other branches of Indian literature. I propose to mention in the sequel a few points that have struck me when perusing this most interesting book.

p. 12, l. 15, we read *uccagghantaḥ*, and p. 271, l. 6, *nāsty-uccagghanollāpanadānaṃ*. Bendall compares in the notes Pāli *ujjhaggati* and Hindi *cagh*. He might have added that this root *cagh* 'to laugh, to be pleased' is found already in Açoka's pillar inscriptions, Edict IV (see Cunningham, Corpus inscriptionum indicarum, pp. 109, 110).

p. 174, l. 7, we read *pattīyasi*, which Bendall declares to be a thoroughly prakritic form. Cf. Mahāvastu, ii, 517, and Trenckner, Pāli Miscellany, p. 79.

p. 182, l. 2, *naḍacippilikaṃ vā cipyamānasya*. Bendall compares Marāthi *cipnen*, 'to squeeze,' but the root occurs also in Pāli *cippiyamāna*, Milindap. 261, where Rhys Davids renders it by 'crushed flat between their teeth.'

p. 199, l. 8, *posho*. Bendall calls this a prakritic form not hitherto found in literature. We find it in the Saddharma-puṇḍarīka, iii, 39 (Burnouf, p. 53; Kern, p. 82), where the stanza begins thus: *Yathā hi poshasya bhaved agāram*, etc.

p. 247, l. 7, read *īçādhāro* instead of *īshādhāro*, and cf. p. 246, l. 4.

p. 331, l. 11, *te carakāḥ parivrājaka tīrthyāḥ*, etc. Bendall has already called attention to this extract from the Ratnolkā-dhāraṇī in the J.R.A.S., 1901, p. 122 ff., and similar lists of Indian sects in the time of the Buddha have been drawn up by Rhys Davids in the J.R.A.S., 1891, pp. 409–413, and 1898, pp. 197–198 (the latter from Aṅguttaranikāya, iii, p. 276). The question is treated at some length by Fa Hian

in his Foe Koue Ki (translated by Abel Rémusat, Paris, 1836), p. 148 ff. *Sūryānuvartakapañcatapānaṃ* of the Çikshās° corresponds to "aux ardeurs de la flamme et du soleil (ce qu'on nomme les cinq chaleurs)," Foe Koue Ki, p. 151; *kukkuragovratikā* to "le précepte du bœuf et du chien," Foe Koue Ki, pp. 150, 158; *kaṇṭakabhasmatṛiṇaçayānaṃ* to "en se souillant avec des cendres, en couchant sur les herbes épineuses," Foe Koue Ki, p. 151.

The beginning of the list seems to be traditional, as we meet with it also in the corresponding list of the Mahāvastu (iii, 412, 7–10). There, however, the following sect is that of the *traidaṇḍakā*, corresponding to the *tedaṇḍikā* of the Aṅguttara list. Rhys Davids (J.R.A.S., 1898, p. 197) explains this as "that school of Brahmin beggars who carried three staves bound up as one." I think that the three daṇḍas alluded to are the kāyadaṇḍa, the vacīdaṇḍa, and the manodaṇḍa (cf. Majjh. i, 372, and Neumann's quotation from the Sannyāsopanishad in his Reden Gotamo Buddho's, ii, 54). The next in the Mahāvastu list is *mānandika*, where Senart, ii, 522 (though hesitating), and Bendall consider the *m* as an irregular Sandhi, and the following as a proper name Ānandika. I think that we ought to read *māgandika*, and that this sect corresponds to No. 6 of the Aṅguttara list, but I cannot explain the term in a satisfactory way, nor those that follow immediately in the Mahāvastu list. The expression *ulūkapakshika* refers, indeed, to the Vaiçeshika sect, as Senart suggested, but Bendall seems not willing to admit. This is confirmed by Majjh. i, 78, and by Foe Koue Ki, 152, where it is stated that the Vaiçeshikas were called "ermites chouettes." The corresponding Jain list has been discovered by Professor Leumann in § 73 of the Aupapātikasūtra: . . . . goyama-govvaiya-gihidhamma-dhammacintaga-aviruddha-viruddha-vuḍḍha-sāvaga-ppabhitayo.

I conclude this review with my best thanks to Professor Bendall for the good and solid work he has given us in his edition of the Çikshāsamuccaya.

E. MÜLLER.

Berne, June, 1903.

ON CERTAIN SUFFIXES IN THE MODERN INDO-ARYAN VERNACULARS. By GEORGE A. GRIERSON. (In the Zeitschrift für Vergleichende Sprachforsthung auf dem Gebiete der Indogermanischen Sprachen, herausgegeben von E. Kuhn und J. Schmidt. Gütersloh: Druck und Verlag von C. Bertelsmann.)

Beames' Comparative Grammar of the Modern Aryan Languages of India, as well as my own Grammar on the same subject, were published more than twenty years ago. Since that time much progress has been made in the knowledge of the Indo-Aryan vernaculars. Some theories have been confirmed, others have been shown to be untenable, and not a few new views have been opened up. The largest share of this advance is due to the researches connected with the great Linguistic Survey of India, which has been in progress for some years, and the completion of which, I believe, we may shortly expect. Its results are sure to provide a rich and valuable mine of new and reliable information; and it is to be hoped that Dr. Grierson, the able Director of the Survey, will himself elaborate them into a new Comparative Grammar which shall be abreast of our present knowledge of the modern vernaculars and their antecedent stages.

The article under review is a contribution towards such a Grammar. It deals with some of the hitherto most controverted points in the Indo-Aryan vernaculars,—the suffixes which are commonly employed to form "the Genitive and Dative cases of nouns, and the Conjunctive Participle of verbs," and which are "connected with the Sanskrit root *kṛ*, to make, or with the Sanskrit suffixes *tana* and *tya*."

The term 'suffix,' as here employed, requires an explanation, which is not given in so many words in the article, but which may be deduced from its concluding observations. The term usually employed has been 'postposition.' Dr. Grierson, in the course of his article, shows that in certain cases the postpositions form compounds with the oblique form of the nouns to which they are appended,

and having formed compounds they become mutilated and coalesce with the nouns so as to form a mere inflection or termination of it. For example, Mārwāṛī has the noun *ghōḍō* (nominative), a horse; its oblique form is *ghōḍā*; and its genitive is *ghōḍārō*, formed with the termination *rō*. But this termination is really the mutilated remnant of the genitive postposition *karō*, which was compounded with the oblique form *ghōḍā* (i.e. *ghōḍā-karō*), and afterwards, by the elision of *ka* (according to certain well-known phonetic laws), reduced to *rō*. On the other hand, Jaipurī has the genitive *ghōṛā-kō*, where *ghōṛā* is the oblique form, while *kō* (contracted from *kau*) is the postposition, added without composition. Accordingly, Dr. Grierson rightly insists that terminational genitives (like *ghōḍārō*) should be written as *one* word, while postpositional genitives (like *ghōṛā-kō*) should be spelled with a hyphen. The particular interest of this insistance lies in Dr. Grierson's statement (p. 491) that "the difference between postposition and termination is the great difference between the modern languages of the current Sanskrit Madhya-dēśa and those of the rest of Aryan India." The promised proof of this statement will be awaited with much interest. It appears that the term 'suffix' is adopted in the article to cover the case of the 'terminations' as well as that of the 'postpositions.' But, if so, the usage has not always been strictly observed. E.g., on p. 488 it is said that "the *rō* has ceased to be a suffix and has become as much an inflectional termination as the *sya* of the Sanskrit *ghōṭakasya* or the *r* of the Bengalī *ghōṛār*." Here one expects 'postposition' instead of 'suffix'; for *rō* by becoming a termination still remains a suffix (being, in fact, enumerated as such in Table i on p. 474). Regarding the distinction of termination and postposition, and the insistance on this distinction being shown in the spelling, Dr. Grierson, I think, is undoubtedly right.

The origin of such terminations as *ar*, *ēr*, *rō* from the postpositions *kar*, *kērō*, *karō*, through curtailment in composition with the preceding noun, has long been known, or at least suspected (p. 487). There was, however, a difficulty

in those cases in which the composition, apparently, was one of the postpositions with a noun in the oblique form, the latter being itself an original genitive case. For example, the Mārwāṛī genitive *ghōḍārō* would presuppose the fuller form *ghōḍā-karō* (or *ghōḍā-kērō*), the latter being a compound of the oblique form *ghōḍā* and the postposition *karō*, equivalent respectively to Sanskrit *ghōṭakasya* and *kāryakaḥ*. "In Sanskrit or Prakrit," it is said, "true compounds are not formed with the first member in the genitive case" (p. 487). To this difficulty there are two possible answers. It may be said that the intermediate form *ghōḍā-karō* is, in this case, not really a genitive compound, equivalent to *ghōṭakasya-kāryakaḥ*, but an ordinary compound, i.e. *ghōṭaka-kāryakaḥ*. That is, *ghōḍā*, though accidentally identical with the oblique form, is, in these circumstances, not really an oblique form. Or, if this solution is not considered satisfactory, it may be shown that, as a matter of fact, undoubted cases of composition do occur in which the first member is inflected. Dr. Grierson has elected the second alternative. He shows that in the Ḍāṅgī conjunctive participle a postposition is compounded with an inflected noun. For example, Ḍāṅgī *uṭhir*, having risen, is contracted from *uṭhi-kar* (pp. 482, 487), and the latter is a compound of the postposition *kar* with the inflected noun *uṭhi*. This *uṭhi* is properly itself a conjunctive participle, Prakrit **uṭṭhi* or *uṭṭhia* = Sanskrit *utthāya*; but such conjunctive participles are now admitted to be properly nouns in the instrumental case (p. 479). Hence Ḍāṅgī *uṭhir* ultimately represents a compound the first member of which is in the instrumental case. Now, as Dr. Grierson rightly observes (p. 474), in the middle, or Prakrit, stage of the Indo-Aryan vernacular, "the three cases (instrumental, ablative, locative) were confused, and became one case, usually employed in the sense of the locative." Hence, this 'confused,' or indeterminate case, as represented in the modern vernacular stage of the Indo-Aryan, is called by him "the (modern) locative." We may, therefore, preferably define the Ḍāṅgī conjunctive participle *uṭhir* as a word

in which a postposition (*r* = *kar*) is compounded with a noun in the locative case (*uṭhi*). For the purpose of explaining the origin of the mutilated genitive suffixes in question, therefore, Dr. Grierson is justified in establishing the rule (p. 482) that "postpositions can be compounded with nouns in the oblique form, and the whole treated as one word, subject to the phonetic rules which obtain in such cases." It should be added, however, with regard to the rule, quoted above, about the structure of 'true compounds,' that even in Sanskrit instances are by no means unknown in which compounds are made with the first member in the accusative or locative, or even the instrumental or genitive cases. Examples are given in Whitney's *Sanskrit Grammar*, § 1250, where it is said that accusative compounds occur "quite often," and locative compounds "not seldom." A phenomenon which was possible in literary Sanskrit cannot have been impossible in the vulgar language, where it may well have attained much greater prevalence.

With regard to the conjunctive participle, Dr. Grierson enters into a detailed investigation of its nature and origin (pp. 479–483). Having stated that the various forms of the Sanskrit conjunctive participle are only so many "nouns in various cases" (instrumental, dative, locative), and that in Apabhraṁśa Prakrit the infinitive, which in Sanskrit is the accusative of a noun, can also be used as a conjunctive participle, he proceeds to divide all the modern Indo-Aryan suffixes of the conjunctive participle into six groups. He next shows by a separate examination of each group that they all "can be explained as (modern) locatives," that is, as representatives of the older indeterminate case, above referred to. There is this, however, to be observed, that, if the termination *i* (as in *uṭhi*, having risen, *kari*, having done) is rightly referred to the Sanskrit *ya*, it goes back to an original instrumental case; while the termination *ai* or *ē* (as in the conjunctive participle postpositions *kai*, *kē*, *nē*, *jē*) is referable to an original locative case. Again, the Oṛiyā termination *u*, and the element *ō* or *ū* in the Marāṭhī terminations *ō-ni*, *ū-nē*, etc., if they are rightly referred to

the Prakrit infinitive termination *iu*, do not go back to any 'case' at all, but to an original Sanskrit uninflected noun in *i-tu*. This follows as a necessary consequence, if Dr. Grierson's derivation of the Marāṭhī termination *ō-ni*, etc., is correct, according to which *ni* is the mutilated remnant of the Sanskrit suffix *tana* compounded with an original conjunctive participle ending in *ō*. For example, Marāṭhī *uṭhō-ni*, having risen, would represent Prakrit *uṭṭhiu-taṇē* (Sanskrit **utthitu-tanē*), where the syllable *ta* is elided by the action of the ordinary phonetic rules. The employment of the crude base of the infinitive in *i-tu*, to form compounds, is not at all uncommon in Prakrit (especially with *kāma*, desire; see Professor Pischel's *Prakrit Grammar*, § 577); nor is its employment unknown to form conjunctive participles (e.g., *bhajjiu*, 'having broken,' *ibidem*, § 579). The derivation of the element *ni*, *nē*, etc., however, from Sanskrit *tana*, Prakrit *taṇa*, is open to the same objection as its derivation from the Prakrit termination *ūṇa*, namely, that according to the law discovered by Dr. Konow (*Journal* R.A.S., 1902, p. 419, quoted by Dr. Grierson on p. 483) it should be *ṇi*, *ṇē*, etc.[1]

The suffixes of the dative and genitive are subjected to a similar investigation, the article commencing with the former (pp. 473–479) and ending with the latter (pp. 485–491). Dr. Grierson shows that most of them are ultimately referable to one of two Sanskrit sources: either (1) to one of the participles, (*a*) *kṛta*, done, or (*b*) *kārya* or (*c*) *kṛtya*, to be done, of the root *kṛ*, do; or (2) to one of the two suffixes (*d*) *tana* or (*e*) *tya*. In Prakrit, under its phonetic rules, these words assume (in the nominative singular) the forms (a^1) *kau* or *kiau*, or (a^2) *kadau* or *kidau*, (b^1) *kērau* (shortened **karau*), or (b^2) *kajjau*, (*c*) *kaccau*, (*d*) *taṇau*, (*e*) *ccau*. Moreover, when compounded with the governed noun, their initial syllables *ki* or *ka* or *kē* and *ta* may be elided. Thus in the modern vernaculars there result the following forms,

[1] The difficulty is admitted by Dr. Grierson, as I see from a private letter (of the 3rd June). In it he also gives a hint of a solution, which, however, I shall better leave to him to disclose when it has been fully worked out.

distributed over the different languages as shown in Tables i and ii: (a^1) *kau, kō, ku, k*; (a^2) *dā*; (b^1) *kērō, kēr, kar, ēr, ar, rō*; (b^2) *jō*; (*c*) *cā*; (*d*) *taṇau, taṇō, nau, nō, nu*; (*e*) *cā*. The (*c*) and (*e*) forms are identical, and hence Dr. Grierson suggests the possibility of an alternative derivation for the Marāṭhī suffix *cā*, though, for himself, he appears to favour the form (*e*) (p. 490). Not derivable from either source are the suffixes *sando* and *hando*. These Dr. Grierson is disposed to derive from the present participle of the root *as*, be, which in Sindhī has the special meaning of 'peculiar to' (p. 489).

The derivation of Prakrit *kērō, kērau* from the Sanskrit *kāryaḥ*, instead of from *kṛtaḥ*, is based on the consideration that *kērō*, which is properly Śaurasenī, requires an intermediate form *kariō*, while *kṛtaḥ* only yields Śaurasenī *karidō* (p. 486). Another reason, to my mind equally forcible, is that *kāryaḥ* affords the only possible way of obtaining a satisfactory derivation for the Sindhī *jō* through the intermediate Prakrit *kajjau* (p. 488).

The meaning 'made by, or of, or for' is obviously well adapted to impart to a word the function of a genitive case-suffix. This explains the use of the past participle *kṛta* for that purpose. In the case of the future passive participle *kārya* or *kṛtya*, 'to be made,' it must be assumed that it suffered a change of signification. Dr. Grierson adduces as evidences in support of the actual fact of such a change that the Sanskrit noun *kārya*, modern *kāj*, means both 'a thing to be done' and 'a thing done,' and that in the Sanskrit of the Mahāvastu the future participle *kṛtya* is actually employed as a suffix of the genitive (p. 486). The Sanskrit locative *kṛtyē* and the modern locative *kājē*, which are also adduced (footnote on p. 486) as actually occurring in the sense of a dative postposition, exactly like Sanskrit *kṛtē*, are less conclusive. For with the dative there is no such difficulty as with the genitive: the dative sense (for or for the sake of) can be expressed by the future participle just as well as, indeed better than, by the past participle. As to the suffix *tana*, the identity of it with the noun *tana*, offspring, may be suggested. The suggestion may be nothing new, though

I do not remember at this moment having seen it elsewhere. The meaning 'sprung from' would lend itself to the function of a genitive suffix just as well as 'made by.'

Sanskrit uses the locative *kṛtē* and the instrumental *kṛtēna* to subserve the function of the dative, and *tana* to turn adverbs into adjectives (e.g. *agrē-tana*, afore-going). These are devices which probably crept sporadically into the (literary) Sanskrit from the contemporary vernacular or colloquial old language, in which, no doubt, they were much more common. From the old vernacular they not only descended into the Prakrit and modern vernaculars, but their application spread to other parts of the language. Those words, *kṛta* and *tana*, gradually came to be used for the purpose of turning every genitive into an adjective (e.g., in the dog-Sanskrit of the Bower MS., v, 16, *tē-kṛtā cintā*, thy thought; Beames, Comp. Gram., ii, 287, *Drupadi-kēri lajjā*, the shame of Drupadi; Hema Candra, iv, 361, *tuha-taṇaum̐ kulu*, thy race). It thus came to pass that in the modern vernaculars the genitives are uniformly adjectives, agreeing with their governing noun in number, gender, and case (p. 476).

Like the Sanskrit locative *kṛtē* and instrumental *kṛtēna*, the Prakrit instrumental *taṇēṇa* was used to express the dative (e.g. Hem. iv, 425, *vaḍḍattaṇaho-taṇēṇa*, for the sake of greatness). As already observed, in the middle (Prakrit) stage of the Indo-Aryan language, not only the locative and instrumental, but also the ablative, coalesced into one indeterminate case, which in the modern vernaculars is represented by the locative. After a detailed investigation of the modern dative suffixes (pp. 473–479), Dr. Grierson comes to the conclusion that "(with the exception of the Kāśmīrī) every dative suffix is identical with the (modern) locative of a genitive suffix" (p. 476). The Kāśmīrī dative suffix *kitu* is not a locative, but "the nominative of an adjective, and declined for gender" (p. 474, footnote). It should be added that Dr. Grierson also excepts the Marāṭhī dative suffix *lā* (in Table i) and doubtfully the Naipālī *lāi* (Table ii), not apparently because his rule is not applicable to them, but because (in distinction from the others which are

shown in his Tables) they do not seem to be ultimately referable to either *kṛta* or *tana*.

There are two misprints in the references: on p. 473 read 422 for 421, and on p. 486, footnote 1, read 286 for 285.

A. F. RUDOLF HOERNLE.

ALBUM KERN. OPSTELLEN GESCHREVEN TER EERE VAN DR. H. KERN HEM AANGEBODEN DOOR VRIENDEN EN LEERLINGEN OP ZIJN ZEVENTIGSTEN VERJAARDAG DEN 6 APRIL, 1903. Large 4to; pp. 420. (Leiden: Brill, 1903.)

This stately volume contains articles, varying in length from a page or two to ten or twelve pages, from nearly a hundred scholars, friends, pupils, or co-workers of the leader of Indianist studies in Holland, Professor Kern. They have thus united to testify their loyal reverence and lasting esteem for that great scholar, and to congratulate him on the attainment of his 70th birthday. It would be impossible, and if possible would not be desirable, to attempt any review of the opinions expressed on the many diverse points that are here discussed. It is sufficient to point out that we find among these writers not only a good array of men who owe to the personal teaching of the distinguished Professor the foundation of their knowledge, but a very remarkable list of the leading representatives in Europe and America of all branches of Indianist research. It is a striking testimony to the appreciation, among his cotemporaries throughout the world, of the value of the services rendered to our studies in so many directions and on so many sides by Professor Kern.

The international character of this testimony is a very suggestive and a very encouraging sign of the times. The thinkers throughout the world are coming more and more to form a community by themselves. Unmoved by the religious, military, and commercial rivalries which keep the nations apart, undisturbed by the differences of opinion in such matters which are known to exist among themselves,

they work steadily on in their efforts to add to knowledge. Each worker appeals to a circle far wider than his own university, or even his own country; and he receives recognition and sympathy wherever, in the world, others are pursuing the same or similar enquiries. And this is independent even of agreement in the results arrived at. It is rare for any one scholar to agree with all the conclusions of another scholar, whom he nevertheless loyally admires, and the value of whose work he is quite ready to acknowledge and to defend. And the irresistible tendency of the times will lead to a continual expansion of the boundaries of this republic of thought, to a continual increase in its power and influence in the world.

Another general remark, of a more technical nature, is suggested by this volume. It shows us (precisely as the similar volume published in honour of Professor Weber showed us) how complete is the victory now won in Indianist studies by transliteration. We have here ninety different papers, by as many different authors, on all manner of questions—historical, philosophical, religious, philological—arising out of the studies of the literatures preserved in different languages of India or Further India. Words or passages, some of considerable length, are quoted from those literatures in support of the suggestions made. In every case, whatever the language, they are given in transliteration. This consensus of practice shows that a merely practical, but still by no means unimportant, obstacle to the progress of Oriental study is, in this branch of it, in a fair way to be removed.

We welcome this volume as a well-deserved tribute of affectionate reverence to a great scholar, the pioneer of our studies in so many fields. And we trust that he may long be spared to aid us by his wide knowledge, his earnestness of purpose, and his rare intellectual gifts.

T. W. Rhys Davids.

NOTES OF THE QUARTER.

(April, May, June, 1903.)

I. General Meetings of the Royal Asiatic Society.

April 7th, 1903.—Sir Charles Lyall, Vice-President, in the Chair.

Mr. Harry Price and
Mr. W. H. Noyce

were elected members of the Society.

Mr. Vincent Smith read a paper on "Alexander's Indian Campaign." A discussion followed, in which Dr. Stein, Dr. Hoey, the Secretary, and others took part. The paper will appear in full.

ANNIVERSARY MEETING.

The Anniversary Meeting was held on May 12th, Lord Reay, President, in the Chair.

The following Report of the Council for the year 1902 was then read by the Secretary:—

Report of the Council for the Year 1902.

The Council regrets to report the loss by death or retirement of the following fifteen members:—

There have died—

Lord Kimberley,
Mr. T. Ballard,
Mr. J. Beames,

Sir R. H. Davies,
Professor Cowell,
The Rev. T. Foulkes,
Syed Mohammed Latif.

There have retired—

Mr. J. M'Crone Douie,
Mr. Barendranath Dutt,
Mr. F. L. Goldsmid,
Dr. Sten Konow,
Mr. D. Hogarth,
Mr. F. Sessions,
The Rev. Dr. Welldon,
Mr. E. Rose.

On the other hand, the following forty-three members have been elected:—

H.R.H. the Prince of Wales,
Mr. Douglas Ainslie,
Sir Steuart Bayley,
Mr. H. C. Fanshawe,
The Rev. Dr. J. E. Marks,
Mr. Moung Tha Hnyin,
Mr. E. M. S. Perowne,
Mr. F. G. Hilton Price,
General A. T. Reid,
The Raja Pertab Bahādur Singh of Partabgarh,
The Mahārāja of Bobbili,
Mr. D. Sassoon,
Mr. W. M. Aders,
The Rev. H. H. B. Ayles,
Mr. J. A. Bourdillon,
The Rev. W. Shaw-Caldecott,
Prince Boris Chakhovsky,
Count H. Coudenhove,
Mr. Kali Kumar Das,
Mr. L. B. Dass,
Mr. Ferrar Fenton,
Mr. Edmund Forbes,

Mr. Oo Ohn Ghine,
Miss Winifred Gray,
Professor Hagopian,
Mr. Halil Halid,
Miss Hardcastle,
Dr. Kapadia,
Mr. J. Harding King,
Count Landberg,
Mr. K. S. Menon,
Mr. D. B. Parasius,
Mr. M. H. Phelps,
Mr. Lionel Proud,
Mr. Bolaki Ram,
Mr. W. H. R. Rivers,
Professor Kishan Singh,
Bhārat Bhooshan Lal Romesh Sinh,
Mr. Moung Tsain,
Mr. Abdullah al M. Sohrawarthy,
Mr. N. P. Vaid,
Mr. V. P. Vaidya,
Mrs. Wrenshall.

Of the subscribing libraries, three have been added to the list and none have resigned.

These figures show a total increase of thirty subscribing members and libraries; and, as the number of deaths and retirements is this year lower than usual, the net increase is about double the average increase of the previous years. The total number of members on the 1st of January for each year since 1889 is as follows:—

1889	...	432			
1890	...	437 + 5	1897	...	524 + 1
1891	...	450 + 13	1898	...	532 + 8
1892	...	459 + 9	1899	...	553 + 21
1893	...	476 + 17	1900	...	551 − 2
1894	...	493 + 17	1901	...	566 + 15
1895	...	492 − 1	1902	...	577 + 11
1896	...	523 + 31	1903	...	607 + 30

showing an average increase of about twelve. For the first time in the history of the Society the membership has this year reached to more than 600; and as there is no reason to believe that the conditions leading to the steady progress shown in this table have ceased to act, the Council ventures to hope that a similar progress will be shown in the years to come.

The receipts from members' subscriptions show a decrease of £17 compared with last year's total, which was the highest that had so far been reached. The amount of subscriptions to the Journal is £156, as against £154. There has been a decrease in the sales of back numbers of the Journal, which amounted this year to £18 12*s.*, as against £29 2*s.* last year; and there has been an increase of £58 7*s.* in the sums received for rent. The total receipts show £1,460 13*s.* 6*d.*, as against £1,391 15*s.* 11*d.*, and this is the first time in the history of the Society that the receipts have been over £1,400.

On the expenditure side the cost of the Journal shows an increase of £125 3*s.* 6*d.* This is, however, mainly a matter of account. As was mentioned in last annual report, a cheque for £95 for the cost of printing the October Journal in 1901, though paid in time to appear in the accounts for that year, was not presented to our bankers till after the end of the year. It has therefore to appear in this year's accounts, instead of in last year's, to which it properly belongs. Subtracting the amount of this cheque, which belongs to last year's expenditure, the expenditure for the year 1902 was £1375 9*s.* 4*d.*

The series of monographs projected by the Council appears this year on both sides of the account, the sales showing £3 14*s.* 4*d.* and the expenditure £31 2*s.* Two of the volumes in this series have appeared during the year 1902, that is to say, Dr. Hirschfeld's "New Researches into the Composition and Exegesis of the Koran" and Dr. Winternitz's "Catalogue of Sanskrit MSS. in the Society's Library" (to which was added an appendix by Mr. F. W. Thomas). Three others are in the press, and the Council hope that two at least out of those three will be ready for publication before the end of the year.

As soon as funds are available it would be desirable to have a new edition of the catalogue of our Malay and Burmese MSS., and also of the Sanskrit MSS. in the Tod Collection, which are not included in the catalogue, just published, of those in the Whish Collection. The time is also rapidly approaching when a new edition of the catalogue of the printed books in the Society's library ought to be undertaken. The number of entries, in our supplementary card catalogue, of books presented or bought since the present catalogue was closed, is so large that the case in which the cards are kept can no longer hold them. And as it is precisely these new acquisitions that are especially in request, the existing catalogue, in which they do not appear, is rapidly becoming obsolete. The Council makes no apology for calling attention to these needs. It is quite aware that each new step forward, so far from being final, only brings into clearer view the necessity, or the advisability, of taking another step further on. And this is no matter for regret. It is the inevitable result of the nature of the pioneer work the Society endeavours, with the very inadequate means at its disposal, to carry on.

At the final general meeting of the last International Congress of Orientalists held at Hamburg, the office of this Society was declared to be the permanent bureau of the organising authorities of such international congresses in future. No doubt the reasons which led to this decision were chiefly of a practical and business nature. But the Council is none the less gratified at this mark of confidence, and trusts that the step thus taken will conduce to the furtherance of the cause of Oriental research.

The Council has laid before the Government of India a carefully thought out scheme for the annual publication of an Indian Record Series to contain the material documents out of which a history of India may eventually be reconstructed. The Government has, in principle, approved the scheme; and a detailed list of proposals for the first volumes to be published having been laid before the Government for its consideration has just received its general approval.

It would be quite unnecessary to enlarge on the great importance of this project. When it has been carried out it will place at the service of scholars such aids to study as are now obtainable by European historians, and will mark an epoch in our knowledge of the greatest of our dependencies.

During the year under review the Council availed itself of the unique occasion of the presence in London, to attend at the Coronation of His Majesty, of a number of the princes of India, to organise a banquet to be given in their honour. A committee, under the able presidency of Sir Steuart Bayley, to whom the thanks of the Society are especially due, made the general arrangements for the entertainment; the final details having been left in the very competent hands of Dr. Thornton and Mr. Wollaston. It proved a great social success; and, so far from interfering in any way with the intellectual work of the Society, did a great deal to break down the indifference, arising from imperfect knowledge, with which its efforts are too often met.

A similar remark applies to the action taken, under the incentive of Mr. Wollaston, to organise the grant by the Society of a gold medal to be given to the best essay, on some subject of Indian history, sent in from the boys in the principal public schools in England. The best essay in each school (the adjudicator in this case being the head-master of the particular school) will entitle the boy who wrote it to a prize of books. And the best of all these best essays (the adjudicator in this case being a committee of the Society) will entitle the boy who wrote it to the Public School medal. Rules have been drawn up to make the procedure clear, and have been accepted by the head-masters of Eton, Harrow, Winchester, Westminster, the Charterhouse, Rugby, and Merchant Taylors. The schools have undertaken to give instruction in the subject, and in this year a number of boys will be studying the life and history of Akbar, which is the subject selected for the first medal.

This being the third year since the Society's gold medal for Oriental research was awarded to Dr. E. W. West, the

doyen of Pahlavi students in Europe, the Council has had to select his successor. Under the advice of the Committee of Selection, consisting this year of Sir Raymond West, Sir Charles Lyall, and Professor Strong, the Council has awarded the medal to Sir W. Muir, for so many years a Vice-President of the Society, who has done so much to further the knowledge, among English-speaking people, of the history of Muhammadanism. Sir W. Muir was President of the Society from May, 1884, to May, 1885, when he left London to take up his duties as Principal of the University at Edinburgh. The following is a complete list of the Presidents of the Society from its foundation till to-day:—

President.	Year.
The Right Hon. C. W. Williams Winn	1834
The Right Hon. C. W. Williams Winn	1837
The Right Hon. Earl of Munster	1841
The Right Hon. Lord Fitzgerald and Vesci ...	1842
The Right Hon. Lord Auckland	1843
The Right Hon. Lord Auckland	1846
The Earl of Ellesmere	1849
Lord Ashburton	1852
Professor H. H. Wilson	1855
Viscount Strangford	1861
Sir T. E. Colebrooke	1864
Viscount Strangford	1867
Sir T. E. Colebrooke	1869
Sir H. C. Rawlinson	1869
Sir T. E. Colebrooke	1871
Sir H. B. E. Frere	1872
Sir T. E. Colebrooke	1875
Sir H. C. Rawlinson	1878
Sir T. E. Colebrooke	1881
Sir H. B. E. Frere	1882
Sir W. Muir	1884
Colonel Yule	1885
Sir T. Wade	1887
The Right Hon. Earl of Northbrook	1890
The Right Hon. Lord Reay	1893

In conclusion, the Council begs to congratulate the Society on the continued progress in the membership, the financial

position, and the work of the Society. But it cannot do so without pointing out at the same time the absurd discrepancy between, on the one hand, the slender resources at its disposal and, on the other hand, the immensity and interest of the questions with which the Society ought to deal. In spite of the fact that the Journal has been enlarged, and that the two series of Oriental Translations and of Monographs have been, under great difficulty, successfully started, the work accomplished is almost as nothing compared with that which remains undone; and whole branches of historical enquiry of the most important kind are scarcely represented in its pages at all. The Council has now under its consideration a scheme for supplying one of those defects by the publication of a Journal to be devoted to the study of the Far East, and especially of China and Japan, and it hopes in the next Report to be able to say that this has become an accomplished fact. But the Council would venture to make a special appeal to the members for help both in money and in work, and would remind them that one very practical way to help on the cause of Oriental research is to make the Society a legatee by their wills of such a sum as they may be able to devote to the purpose.

Sir William Lee-Warner and Sir Raymond West retire by rotation from the office of Vice-President, and the former does not wish to be re-elected. The following members retire, under the rules, from the Council :—

Dr. Gaster,
Mr. Kennedy,
Mr. Kay,
Professor Browne,
Dr. Thornton.

In place of them the Council proposes the election, as Vice-Presidents, of

Sir Raymond West,
T. H. Thornton, Esq., C.S.I., D.C.L.;

and of members of Council, of

Dr. Gaster,
Mr. Syed Ali Bilgrami,
Mr. Irvine,
Mr. F. W. Thomas,
Colonel Sir Richard Carnac Temple, Bart.

The Council recommends the reappointment for the year of the Hon. Librarian, Dr. Codrington, and of the Hon. Secretary, Dr. Cust. As the present Hon. Treasurer wishes to retire, the Council recommends the election, in his place, of Mr. James Kennedy. And the Council desires to place on record its sense of the great services rendered, for so many years, to the Society, by the late Hon. Treasurer, Mr. Brandreth.

The usual statement of accounts, with the Auditors' report upon it, is laid on the table.

Mr. T. H. Thornton, C.S.I., D.C.L., in moving the adoption of the report of the Council, said:—I have been asked as a member of the Council to move the adoption of this report, and I do so with the greatest pleasure, because, although I cannot claim to be a profound Orientalist, I believe there is no one to whom I can yield in taking the deepest interest in the well-being and progress of this Society. My connection with the Royal Asiatic Society, indeed, commenced from a very early period—from the middle of the last century, when my father (a member of the Society) took me as a schoolboy to a great meeting, at which the Prince Consort was present, to hear Major Rawlinson, then a young man of exceedingly modest bearing, read a description of the progress made by him in the decipherment of the Cuneiform Inscriptions of Assyria. While at Oxford I became a pupil of a very distinguished member of this Society, Horace Hayman Wilson, then Boden Professor of Sanscrit, studied philology under Max Müller, and Hebrew under Pusey. After upwards of a quarter of a century spent in the Government service in India (in the course of which I was able to give some help in the

ABSTRACT OF RECEIPTS AND

RECEIPTS.

	£ s. d.	£ s. d.
Subscriptions—		
92 Resident Members at £3 3*s*.	289 13 0	
,, ,, in advance	18 9 0	
1 ,, ,, in arrears	3 3 0	
182 Non-Resident ,, at £1 10*s*.	273 0 10	
3 ,, ,, in arrears	4 10 8	
,, ,, in advance	23 0 0	
14 ,, ,, at £1 1*s*.	14 14 0	
6 Library Members at £1 10*s*.	9 0 0	
		635 10 6
4 Compositions		90 0 0
Journal—		
Subscriptions	156 0 0	
Sale	18 12 0	
Sale of Pamphlets...	18 0	
Sale of Index	18 0	
Advertisements	8 17 8	
		185 5 8
Rents		238 5 0
Dividends and Interest—		
N.S.W. 4 per cent.	30 3 4	
Midland 2½ ,, ...	4 19 11	
Interest on Deposit in Bank	9 15 1	
,, ,, in Savings Bank	6 15 8	
		51 14 0
Donations—		
India Office	210 0 0	
Lord Stanmore	37 10 0	
Major Vost	10 0	
		248 0 0
Monograph and Catalogue Sale		4 14 4
Subscriptions paid in error		7 4 0
Total		£1460 13 6
Balance at Bank, January 1, 1902	169 1 3	
,, on Deposit	162 15 0	
,, P.O. account	31 8 2	
,, Petty Cash	7 3	
		363 11 8
		£1824 5 2

Funds.

£802 13*s*. 10*d*. New South Wales 4 per cent.
£212 8*s*. Midland 2½ per cent. debenture.
£198 5*s*. 4*d*. 3 per cent. Local Loans.

ORIENTAL TRANSLATION FUND.

RECEIPTS.

	£ s. d.
Balance, January 1, 1902	112 7 0
By sales	48 5 6
Donation from Mrs. Arbuthnot	149 8 11
	£310 1 5

INDIA EXPLORATION FUND.

	£ s. d.
Balance, January 1, 1902	24 18 0
Subscriptions	25 14 0
	£50 12 0

BANQUET.

	£ s. d.
Receipts	424 4 0

EXPENDITURE FOR THE YEAR 1902.

EXPENDITURE.

	£ s. d.	£ s. d.
House—Rent	343 16 0	
Fire Insurance	10 0 0	
Water	12 8 0	
Gas	28 1 11	
Coals	4 17 0	
Income Tax	17 1 8	
Repairs	17 18 8	
		434 3 3
Salaries—Secretary	250 0 0	
Assistant Secretary	50 0 0	
		300 0 0
Journal—Printing 5 quarters	424 8 6	
Illustrations	19 15 0	
Postage	24 0 0	
		468 3 6
Library—New Books	3 10 3	
Binding	10 6 4	
		13 16 7
Wages—Housekeeper	60 0 0	
Boy	17 7 0	
		77 7 0
Stationery		15 18 6
Bank Charges		10 6
Miscellaneous		13 11 10
Stamps		35 0 0
Petty Cash		25 0 0
Returned Subscriptions		12 0 0
Report on Abhayagiri Dagaba		43 16 2
Monographs		31 2 0
Total		£1470 9 4
Balance at Bank, December 31, 1902	58 4 3	
,, on Deposit	254 7 6	
,, P.O. account	38 3 10	
,, Petty Cash	3 0 3	
		353 15 10
		£1824 5 2

ESTIMATED LIABILITIES.

Compositions to be invested	84 0 0	
Rent, December quarter	87 10 0	
Drugulin, printing Sanskrit Catalogue	94 9 7	
Austin, for Major Gerini's work...	150 0 0	
,, Professor Strong's work...	20 0 0	
Mr. Le Strange's work	20 0 0	
		£455 19 7

ORIENTAL TRANSLATION FUND.

Printing Vol. XIII, Messrs. Billing	110 12 6	
,, ,, Drugulin	38 16 5	
Binding 50 copies Vol. XII	1 1 0	
Office expenses, Salary	10 0 0	
Balance December 31, 1902	149 11 6	
		£310 1 5

INDIA EXPLORATION FUND.

Printing expenses	4 11 0	
Balance December 31, 1902	46 1 0	
		£50 12 0

BANQUET.

Expenses	£424 4 0

Examined with the books and vouchers, and found correct, April 6th, 1903.

J. KENNEDY, for the Council.
SYED ALI BILGRAMI, } for the
E. T. STURDY, } Society.

MEDAL FUND.

Dr.	£	s.	d.
To Balance in hand, December 31, 1901	19	6	4
,, Dividends, 1902 (£325 Nottingham Corporation 3 per cent. Irredeemable Stock)	9	15	0
,, Interest to December 31, 1902		11	0
	£29	12	4

Cr.	£	s.	d.
By Balance in hand, December 31, 1902 (P.O. Savings Bank)	29	12	4
	£29	12	4

Funds—Nottingham Corporation Stock, £325.

PUBLIC SCHOOL MEDAL FUND.

Dr.	£	s.	d.
To Balance in hand, December 31, 1901	23	9	0
,, Dividends, 1902 (£600 Nottingham Corporation 3 per cent. Irredeemable Stock)	18	0	0
,, Interest to December 31, 1902		11	0
	£42	0	0

Cr.	£	s.	d.
By Book-plates, dies, etc.	15	15	0
,, Printing do.		10	6
,, Balance in hand, December 31, 1902 (P.O. Savings Bank)	25	14	6
	£42	0	0

Funds	£	s.	d.
Nottingham Corporation Stock	600	0	0
P.O. Savings Bank	8	8	0
	£608	8	0

Examined with the books and vouchers, and found correct, January 1st, 1903.

E. T. STURDY.
J. KENNEDY.
A. N. WOLLASTON.

MEDAL PUBLICATIONS FUND.

Dr.	£	s.	d.
To Balance in hand, December 31, 1901	14	1	0
,, Dividends, 1902 (£600 Nottingham Corporation 3 per cent. Irredeemable Stock)	18	0	0
,, Interest to December 31, 1902		13	9
	£32	14	9

Cr.	£	s.	d.
By Balance in hand, December 31, 1902 (P.O. Savings Bank)	32	14	9
	£32	14	9

Funds—Nottingham Corporation Stock, £600.

cause of archæological research) I returned to England, and was almost immediately elected to the Council of this Society, and there I have remained ever since, and have served on many important Committees, besides being an occasional contributor to the Journal. I mention all this, not with any view of self-laudation, but simply to show you in what a good position I am for gauging the progress of the institution, and I can say without hesitation that the progress made since the time I was first acquainted with it has been very great indeed. In the first place, the number of members has considerably increased, and now amounts to the respectable figure of upwards of 600, and includes, I am glad to see, the name of His Royal Highness the Prince of Wales. But not only has the number of members increased, it is also to be noted that, whereas, when I first belonged to the Society, there was hardly a single native Indian member, we have now many. During the past year we have elected as many as 15, and amongst these are two distinguished members of noble families—the Rājah Partab Singh of Partābgarh and the Rājah of Bobbili. But not only has the membership increased, but the Journal (our great stand-by) has been very greatly improved both in form and matter, thanks to our distinguished Secretaries — General Sir Frederic Goldsmid, during whose time the valuable "Notes of the Quarter" were introduced, and especially to our present Secretary, Professor Rhys Davids, and his indefatigable assistant, Miss Hughes. Under their *régime* the sale of the Journal has largely increased, and so has the number of libraries to which it is supplied.

Then the attendance at our ordinary meetings has greatly improved. How far this is owing to the introduction of a practice — for which I was myself to a great extent responsible—the practice of providing tea after discussions, I do not know, but, anyhow, the result is satisfactory.

But the Council has not confined itself to the publication of papers and discussions; it has done its best (with the very limited means at its disposal) to promote, by indirect methods, the advancement of Oriental studies and research.

It has endeavoured (but up to the present time, I am sorry to say, in vain) to induce some of the Colleges at Oxford and Cambridge to set aside one or more of their fellowships as rewards for distinguished Oriental scholars, who would be thus enabled to devote their whole time to the scientific study of Eastern languages and literature.

It has prepared lists of appointments for which a scholar-like acquaintance with Oriental tongues is requisite, for, after all, the best form of encouragement for Oriental study is to show that it may lead to something.

Some years ago it provided popular lectures on Oriental subjects by distinguished men such as the late Professor Max Müller and the late Sir William Hunter, but the lectures, though well attended, did not lead, as was hoped, to an increase of members, and had to be abandoned on financial grounds.

It took an important part in organizing and making a success of the Tenth Oriental Congress held in London in 1892.

Through its Transliteration Committee (presided over for some time by the late Sir Monier-Williams) it induced the Oriental Congress held at Geneva in 1894 to pass a scheme of transliteration of Oriental names, which is now published in every number of the Journal. The scheme is not satisfactory to everybody. No scheme of transliteration ever will be. But to have a scheme recognized by a Congress is a great step in advance, and that adopted, which is in harmony with the system of transliteration employed for many years by the Government of India, is gradually winning its way to general adoption.

Through its President, Lord Reay, it endeavoured to secure for Oriental studies a proper place in the scheme of the Teaching University of London.

With the generous help of the late Mr. Arbuthnot it has reconstituted the Oriental Translation Fund, and has already published a translation of Mīr Khwānd's "Rauẓat-us-Safā," comprising the Moslem version of our Bible stories, and detailed lives of Muhammad and his successors, by Mr. E.

Rehatsek; Tawney's translation of a collection of Jain stories, the "Kathā Koṣa"; Gaster's "Chronicles of Jerahmeel," from the Hebrew; and other works, the last issue being Mrs. H. Beveridge's translation of the "Memoirs of *Gul-badan Begum*, aunt of Akbar the Great."

It has arranged for the publication of a series of monographs by distinguished scholars, such as Guy Le Strange and Professor E. G. Browne, and a Catalogue *raisonné* of its Sanscrit MSS. prepared by Dr. Winternitz, and now contemplates the separate publication of papers relating to the Far East.

It has instituted a Gold Medal to be awarded triennially to distinguished Oriental scholars; and has, more recently (with the help of funds generously contributed by some of the Chiefs of Southern India), been able to found in eight of the public schools of England, the authorities of which have undertaken to give instruction in Indian history and geography, a prize of books to be given yearly for an essay on an Indian subject, and a medal to be given to the best of the prize-winners. It is hoped that this measure will have some effect, at any rate, in removing a grave reproach.

Lastly, the Council profited by the occasion of the presence in London of a number of Princes and Chiefs from India, coming to attend the Coronation, to organize a banquet in their honour. The banquet was a great success, and was carried out without the slightest expense to the institution.

In the matter of the triennial gold medal, the prizes in public schools, and the Coronation banquet, the Society owes much to the initiation and energy of our colleague Mr. A. M. Wollaston, C.I.E., and his success has been gained in spite of a good deal of healthy opposition. In a time-honoured Society like ours any movement outside the ordinary groove, outside, that is to say, the limits of pure scholarship and research, is sure to develop the 'conscientious objector,' and theoretically, no doubt, there is much to be said from his point of view. Theoretically, no doubt, it would be better to confine ourselves strictly to scholarlike research and learned discussion; but, practically, it is necessary for

a Society, which, like ours, is unendowed, to keep itself in evidence and endeavour to win the sympathy of a larger audience than pure scholars and archæologists. *Pauperies sine dote* may be good for a philosopher, but is bad for an institution.

But that the status of our Society has in no way suffered in consequence of our transgressions is abundantly clear from the great fact announced this day, namely, that the Government of India, acting on the recommendation of the Council of this Society, has decided to publish a series of State papers having reference to the history of India, and has constituted the Royal Asiatic Society its agent for editing and issuing the volumes.

Moreover, the Coronation banquet, to which exception has been taken as being beyond our province, has led to an exceptionally large increase of members.

Of course, as pointed out in the report, though much has been done and is being done in the way of improvement by the Society, much remains to be done, if only funds were available. We need larger premises in which to store and arrange our valuable books and manuscripts. We could still further improve the Journal if we had not to depend entirely upon unpaid contributions. And in this matter we have had the great advantage of a 'candid friend' in the person of our distinguished colleague Dr. R. N. Cust, who, in a printed paper recently circulated, has given us a list of our shortcomings, which should have a stimulating effect.

But, in spite of 'conscientious objectors' and 'candid friends,' I think we have good cause to congratulate ourselves on the steady progress made of late years, and I for one remain, and hope always to remain—as I trust everyone in this room will remain,—an enthusiastic believer in the future of the Royal Asiatic Society.

Mr. W. Irvine, in seconding the adoption of the report, said:—Dr. Thornton has left so few of the subjects untouched that there remains very little for me to say. I think that the report before us presents a record of progress, slow perhaps, but steady, under every head of our work. Turning

to finance, you will see from the accounts that we have spent in excess of our income not more than the sum of £10; while our outstanding liabilities are only one hundred pounds or so in excess of the cash in hand at the end of the year. In short, we are completely innocent of that vice of hoarding our resources, against which we were warned last year and the year before. I notice that for printing one monograph we have to pay £150; this seems a rather expensive undertaking, even after deduction of the £50 contributed by the author. I should like to know whether the arrangement with the Royal Geographical Society to meet half of this £100 still exists or not. In connection with finance, there is another point that might be mentioned. On the 1st of January, 1902, our member list stood at 577. Deducting 32 honorary and extraordinary members, 63 libraries, 26 resident, and 66 non-resident compounders—187 in all,—we arrive at a residue of 390 paying members. The abstract of the year's accounts shows that there are 93 resident members on the list, all of whom paid; non-resident members 291, of whom 199 paid; library members 6, all of whom paid. It looks as if 92 members, nearly 16 per cent. of the total number, had paid nothing; even at a guinea each, this represents £96 12*s*. Now there may be some who hold with Mine Ancient Pistol, and say, "Base is the slave who pays." But surely the chief end of man, as the member of a learned society, is to pay subscriptions. Would it not be better, then, to enforce the rules in that case made and provided, and strike off these men in buckram, who only serve to swell our list to no good purpose? Dr. Thornton has been reminiscent, and I may follow in his wake. Although I cannot throw my memory back to 1849, I am reminded of the time four and twenty years ago, when I first became a member of this Society. I recollect a meeting in 1880 where there were present Sir Henry Rawlinson (in the chair), Sir Walter Elliot, Sir Edward Clive Bayley, Prof. John Dowson, Mr. W. S. W. Vaux, the then Secretary; and last, but not least, our Hon. Secretary, who is still with us—a hardy evergreen—

Dr. R. N. Cust, with a pointer in one hand and a bit of chalk in the other, demonstrating something or other, I forget what, on a blackboard. The audience consisted of myself and perhaps one other member. No doubt there were giants in those days, men individually greater than we are; but most decidedly we have the advantage in numbers. As to the catalogues, a library without a good catalogue is a very imperfect instrument, and I trust the Council will soon be in a position to carry out its intention of setting aside funds for a revised catalogue of our general library, and new catalogues of the Malay and Burmese MSS., and of the Sanskrit MSS. in the Tod Collection. In the last of these I feel a personal interest, for perhaps among Colonel Tod's books may be found the original Hindi poems of the later bards and rhapsodists (after Chand Bardai), which form the groundwork of his grand but chaotic prose epic, the Annals of Rajasthan. Turning to the library itself, as we are all bookworms here, and as such live on books, we require to be provided with fresh and nourishing diet. Now, if it were not for our friends, sister societies, foreign governments, the India Office, publishers and authors, who are most generous in their gifts, we should run the risk of dying of starvation, as last year we spent just £3 10*s.* 3*d.* on the purchase of new books. On the question of the banquet of last year, I heard some mutterings and murmurings that it was not our business to give expensive public dinners. For my own part, I object as much as anyone to personal advertisement; nor have I any consuming desire to feast in the company of peers, princes, and potentates. Still, in this age of penny and halfpenny papers, no cause, not even the most sober and serious, can hope for a hearing, unless it is kept well before the public. Thus I think our action in a way was justified. At any rate, there is no denying one thing, that the banquet was a great success, thanks to the untiring exertions of our Committee, and especially of Mr. Wollaston. It has, I believe, brought us already several new members, and it cost us, as a Society, nothing at all. Our medals have also been mentioned by Dr. Thornton, and

it is a great pleasure to hear the announcement of the Council that this year the gold medal has been awarded to Sir William Muir, who has so long held a prominent position among Anglo-Indians as an Arabic scholar and as a man of learning, besides his great position as an official; and I am sure he will cherish it to his dying day, as a proof that he has obtained the scholar's best reward—the esteem and approbation of his fellow-workers. Our scheme of school medals, after, I fear, a great deal of difference of opinion, has at length got under way. Let us hope that Mr. Wollaston's persistent energy in the matter will be rewarded by the results. Many seem to think that there will be no results; but putting it at the lowest, some boys will every year find out that there is such a country as India, and that it has a history. The cry is ever that students of the Orient, its language and its learning, are not forthcoming. Who knows on what ground the seed of the sower may fall, what trivial accident may divert the current of a man's whole future life? and a casual schoolboy competition for one of our medals may be the starting-point of some great Oriental scholar's career. By our constitution we are intended to embrace within our fold the whole of the East, with the manifold manifestations of its mind, in language, philosophy, and history. One by one portions of our domain, as they develop, fall away from us, set up for themselves, and we know them no more. Assyriology, in which we have such a glorious past, has abandoned us; with the exception of Mr. Pinches, a host in himself, and a recently joined member, the Rev. Mr. Caldecott. Egyptology also has disappeared from our pages. But there is another subject that I had intended to name, as one in which we might achieve more—China and the Far East,—but our active Secretary has anticipated me, and already the project is far advanced of a new division of our Journal, devoted exclusively to those abstruse but fascinating subjects, the language and literature of China and Japan. The late Mr. Watters once said to me: "This should be called the 'Royal Indian,' not the 'Royal Asiatic Society.'" I do

not think we need pay much attention to this gibe; though, as is only natural in an English Asiatic Society, India must predominate. Our Journal is not a mere organ of Buddhism, as I have heard it called, or of merely Indian philology and philosophy. Take the contents of the four numbers of the Journal for 1902, and you will find that Indian and Buddhist articles occupy only 158 pages, as against 489 pages devoted to Islām, Zoroasterism, Persia, Mesopotamia, and four articles on other entirely non-Indian subjects. Our reviews and notices are even more varied in subject. I had intended to call attention to what I think is a hopeful development—a new movement among educated Bengalis, leading them to take up the history of their own country, and study it from the original sources in a scientific and critical spirit. At last there seems some hope that an indigenous school of writers, following European methods, has arisen. Nor is it only in books written in English that this tendency is displayed, for I have seen historical works in Bengali, where there is—however much of anti-English bias may be present—at least an attempt to discuss and appreciate historical evidence, in preference to mere idle declamation or barefaced compilation. I think we ought on this occasion to make some passing mention of what I consider the greatest English work of Oriental learning during the past year, the "Linguistic Survey of India" by our distinguished member, Dr. Grierson. If you will turn to the brief summary on p. 426 of this year's Journal, you will find that it yields the little fact that there are 147 spoken languages, not merely dialects, in India, belonging to six great groups or families.

The thanks of the meeting have already been expressed to our Council and its officers by Dr. Thornton, and I need say no more. I think we are doing sound work in an unobtrusive manner: endeavouring to hand on the lamp of knowledge, trimmed and replenished so as to serve the future hour, at the same time building up slowly, stone by stone, an imperishable monument of man's unconquerable mind, that may still endure when no Englishman's foot

any longer treads the soil of Hindustan, and our native land has sunk back into its pristine obscurity, a little island set in the remote Atlantic. In brief, we may confidently take as our own the words put by the poet into the mouth of Portius, son of Cato:—

> "'T is not in mortals to command success;
> But we 'll do more, Sempronius—we 'll deserve it."

I beg to second the adoption of the report.

Mr. J. Kennedy: I have been for the last eight or nine years auditor of the Society, and I may say that the questions Mr. Irvine has raised are among those secrets which auditors keep among themselves and ventilate to the Council. It is our duty to see that the amounts which ought to have been realized have been realized, and that the amounts paid have been paid under proper authority. However, this year there was no need to warn the Society. The excess in expenditure referred to by Mr. Irvine is due to the payment for printing five quarters of the Journal, instead of four as usual. Last year we paid for three quarters, and this year for five. Mr. Irvine stated that our liabilities are in excess of our balance-sheet, but of these liabilities £87 10*s.* are for the December quarter of rent, and the rest has been otherwise accounted for, so that our liabilities are quite met by our balance at the bank. As for Colonel Gerini's work, I am afraid I cannot say anything. I cannot answer how much the Geographical Society will pay up and how much we shall be let in for. As for the arrears of subscriptions, it is a thing we have to go over every year. I have the list we use of all the members who have not paid. All the resident members have paid. Of the non-resident members there are 92 who are in arrears, but out of these you must deduct 15 who were elected at the end of the year, and that leaves 77 to be accounted for. They do not get the Journal, and if they give nothing they get nothing. Of the 77, 47 are Asiatics. We elect a number of Asiatic members annually who during their residence in London come here, and who, as members, pay for that time only. When they

return to their own country it is impossible to trace them, and after a certain number of years we have to strike their names off the list. Of the remaining 30 members I may say that many of them are men of great distinction: one is the Governor of an English Province; others are in the highest circles of the land, and it is a matter of getting at them. Letters are sent by the Secretary, but very often their Treasurer takes no notice of them unless the matter is specially brought to the notice of the gentlemen concerned. I am sure the Secretary and Council do everything that is possible to realize the subscriptions from non-resident members; from resident members it is, of course, perfectly easy. As to the banquet, I was one of those conscientious objectors who objected, and enjoyed the dinner immensely.

Sir Raymond West: My Lord, I think we must all be quite satisfied, from the explanations given by Mr. Kennedy, that your interests have not been altogether neglected in the financial sphere. As in the carrying on of all businesses, there are points raised from time to time which are open to serious objections and all kinds of difference of views. The truth is, there are not any members of the Council or in the governing departments of the institution who are not personally interested in the welfare of this Society, and who are not determined, as far as their abilities and capacities go, to make the institution a success. I believe, on the whole, you may give the credit to your Council of keeping their eyes open to all the opportunities that present themselves of advancing the interests of the Society, and promoting learning in those spheres which are specially interesting to the members of the Society. You have had suggestions put before you to-day which show that the Council, representing you, are desirous of extending the activities of the Society concurrently with the growth of interest generally in the East, which is now extending itself into new spheres and taking hold also of new points of view. We trust, as members of the Council, that we shall always be fairly abreast of the progress of ideas, and aware of the interests which the developing world opens to us, and we

are determined, if we only have the means, to make the Asiatic Society a great centre of Oriental learning, occupying a relative position at least equal to that it has occupied in the past, and possibly occupying a higher position as the fellowship of men extends. As foreign scholars feel an ever-increasing interest in the work of this Society, we have every reason to be satisfied with the amount of sympathy we get from foreign coadjutors, and we trust that this Society as an international centre of Oriental learning and research will go on as it has in the past, and always be worthy of the traditions which have come down to us; and that in the course of years we may have from time to time to present to you reports as satisfactory as the one now laid before you.

It is obvious to you, ladies and gentlemen, that there are new fields opening out for learning, discovery, and research in the Far East, and we hope that those of you who are—and most of you are—deeply interested in this Society will do all you can to bring in additional members and additional learning to enrich and adorn our Journal, and to make this Society a centre of all Oriental learning and worthy in all ways of the traditions of our Empire.

The President: You will allow me to allude to one or two matters which have not been alluded to as yet. In looking at the roll of those we have to mourn I must especially draw attention to the record of activity of Mr. Beames. Mr. Beames wrote a Comparative Grammar of the Aryan dialects of India, and scholars will admit that it is as great a work of Oriental enquiry as Bishop Caldwell's Comparative Grammar of the Dravidian languages. I think we ought to pay a tribute of respect to so distinguished a man as Mr. Beames. Among others on this list is the name of Sir Robert Davies, who had a very distinguished career in India. Sir Robert was a man of a singularly retiring and a modest disposition, but still one of those men whose influence in India cannot be exaggerated, and his name is held in the greatest esteem in the Province he has governed. I have already spoken of Professor Cowell on various occasions,

and we are all aware of the immense value of his scholarship. We know how greatly he increased while in Calcutta his knowledge of Sanskrit, talking Sanskrit with the pandits there in a way that very few other scholars could do, and thus obtaining his great mastery over the abstrusest questions of the Pantheistic philosophy of India. Syed Mohammed Latif was known to many here present to-day, and his history of the Punjab gives him a claim also to our recollection.

The most important part of the activity of this Society, and that which commends us to the world of learning in Europe and elsewhere, is undoubtedly the Journal, and in connection with the Journal you will allow me to thank the Secretary for the immense care he bestows on that publication. Undoubtedly to Professor Rhys Davids is due to a great extent the status of this Society among the learned Societies of Europe, but it is not his only claim to our gratitude. You are aware that the University of London has a Board of Oriental Studies. Of that Board of Oriental Studies, Professor Rhys Davids is the Honorary Secretary, and as a member of the Senate of the University of London, I wish to state that the value of the work done in that connection by Professor Rhys Davids has given it a status which is greatly due to his activity. The Senate of the University has during the past year adopted a scheme drawn up by the Board for the examination of internal students for the B.A. and M.A. degrees, which can now be obtained by Oriental knowledge alone. That is an important step in advance if we manage to get the internal students. There is the scheme, there are the teachers, but as a matter of fact the number of students is a great deal smaller than it ought to be. But that is a question upon which I will not now dilate. It is unfortunate that here, as in so many other respects, we have all that is otherwise wanted to do the work, and not the means by which the work can be paid for. That applies to the rich collection of MSS. we have in this building, which are all waiting for the research students—waiting for the men to do the work, but which for lack of funds is left in that fallow condition.

This Society succeeded this year in another respect. We pointed out to the Royal Society that the Royal Society alone could not undertake to represent British learning in connection with the International Association of Academies. The Council of this Society invited some of us to assist others in creating an institution which would also represent Oriental languages and a great many other departments of learning. The British Academy has been created, and this is partly due to the initiative of this Association, and I trust that our relations with the new Academy will always be of the most friendly nature. To show how important it is that such an institution should be called into being, I need only mention that one of the things which this International Association of Academies has undertaken is to publish an Encyclopædia of Islam, and you will be pleased to hear that a member of the Council of this Association, who is also a member of the British Academy, represents England —all countries are represented,—and that Professor Browne will co-operate with Professor de Goeje and other scholars in the work which, sooner or later, will be published.

With regard to the Society, I think we may consider we have done our work efficiently during the last year. We are advancing along the line of research, and at the Congress at Hamburg, you will be pleased to hear, this Association was selected as the headquarters of the Oriental Congresses of the future. It was felt that this Association was the only one which had an office, the only one in which the spirit of continuity was sufficient to secure also for the work of the Congresses more continuity than it hitherto had. As a symbol of our new position as regards future Congresses we have obtained the custody of the drinking horn which was given by the King of Sweden to the Congress at Stockholm. It therefore becomes our duty whenever a Congress is held —or rather it will be the duty of Professor Rhys Davids— to be accompanied by this drinking horn to the Congress, and in this respect I hope that the word 'custody' will not involve us in the discussion at present going on on the Education Bill, in which the word 'custody' seems to

puzzle all interpreters of the Bill as to what it means. But in this case it seems to be very simple. I cannot sit down without asking you to join with the Council in their thanks to Miss Hughes for the indefatigable assistance she gives to members in this building. There is only one other event to which I shall allude—with great regret. Among our most valued members is one who, in former days, as long as he was living here in London, was constantly at our meetings and took the greatest interest, and still takes the greatest interest, in all that concerns this institution—Colonel Plunkett. We know that Colonel Plunkett has lost his son in Somaliland lately. He fell there, the bravest among the brave, and if you will allow me I should like to have a letter written to Colonel Plunkett to say that we have the greatest sympathy with him in his grief at the loss of his son.

I hope that next year will be as satisfactory a one, both as regards finance and increase of membership, as last year, that the Council will receive the continued support of the members, and that the activity of the Society will be as marked as it has been in the past.

The report was adopted.

Mr. Hewitt, in proposing the adoption of new rules, said:—The question I wish to lay before you is that I think there ought to be more recognition than there is, in the rules, of the position of the Society as a pioneer Society, partly founded for the publication of papers written by members; and that there should be a distinct assertion in the rules that no paper should be rejected because of the opinions and arguments of the author being disagreed with. I have drawn up a few rules on the subject, and I merely suggest that the question should be considered by the Council. I do not wish to press my rules, or any other rules, upon the Council; all I want is that the question should be considered. The rules I have drawn up are as follows:—

RULES.

1. That all papers submitted by members for publication should, as a rule, be printed in the Journal in the order in which they are received.
2. That if more papers are sent in than can be printed in the first copy of the Journal issued after their reception, preference in publication may be given to papers judged by the Council to be of such special importance as to make their immediate publication desirable.
3. That papers which will, when printed, cover more than pages should be divided by their authors into sections, which will allow of their being printed in successive numbers if there is not room for the whole paper in the number in which the first sections are published.
4. That members whose papers are accepted for publication should be told of the date of the number in which they will be printed.
5. That no papers be rejected because the majority of the members of the Examining Committee or of the Council disagree with the opinions expressed or the conclusions arrived at by the author.
6. That when papers are rejected as unsuitable for the Journal the cause of their rejection should be distinctly stated in writing to the author, who should be allowed, if possible, an opportunity of remedying the defects which caused its rejection.

Several members I have spoken to, or written to, have objected to the last rule, because they say that the work of stating reasons for rejecting would be so immense that nobody would undertake it. I say that papers should be accepted as they are and stand or fall by themselves; and even if the papers are wrong themselves in facts and arguments, and disregard strong arguments against them, they ought to remain, and thus give members of the Society an opportunity of coming forward and saying what they think, and letting others state their objections. Many of the greatest works written have been written in answer to publications which have been objected to as worthless, but still, at the same time, have brought out very great works.

What I would suggest is, that the Council should take the question into consideration, and appoint a Committee to decide as to how far it is possible to go in the direction I have pointed out in these rules.

Mr. Irvine: In the absence of Dr. Codrington, who was called away and who promised to be the seconder of this motion, I rise to second it in order that Mr. Hewitt may have an opportunity of putting his proposal before the meeting.

The President: I understand that Mr. Hewitt only wants these rules to be considered by the Council?

Mr. Hewitt: Yes, I merely want them to be considered by the Council.

The President: I cannot allow one statement to go unchallenged. I do not wish anyone to leave this meeting under the impression that any paper is, at any time, refused in the Journal because opinions are stated in it which are not those of the Council. I think it extremely important that members should know that whatever may be the reason of a paper not being inserted in the Journal, it is not because the opinions which are held by the writer are not those of the Council. As to my own experience, I may say that I have heard discussions on papers since I have held the chair of President, but whether the statements contained in the papers were agreeable to the Council or not, they were set aside, if they were set aside, only because they did not contain sufficiently original matter, or were more appropriate to Journals less strictly scholarly than our own. Unfortunately the Journal is in the position of having so many contributors that we are obliged to make a selection; and in making that selection the question arises, What are the articles most likely to attract the attention of our readers? Therefore no stigma whatever attaches to the fact of a paper having been rejected. And those that are published are published because their contents will add to knowledge. Whatever criticism the action of the Council may incur, I wish to make it quite clear that we have no prejudices and no preconceived opinions, and that all

papers are welcome to us at all times. Having said that, the rules will be very carefully considered by the Council, and we will have communicated to Mr. Hewitt their decision. I hope that decision will give him some satisfaction for the trouble he has taken.

Professor Hagopian : There is one matter to which I should like to allude, and upon which your Lordship has touched. I think that the Council will do well to keep up the standard of its publications, and that is a very laudable object in the selection of contributions and papers. There is that excuse for rejecting some contributions besides the want of room. That struck me at once when I heard the objections advanced as to the rejection of papers—some of which, it was suggested, are rejected because the Council did not agree with the opinions of the writers, and in other cases were rejected for reasons which I could not gather very well. I think the Council are jealous of the reputation of the Society, and they want to keep the Journal up to a high standard.

June 9th, 1903. — Dr. Thornton, Vice - President, in the Chair.

Mr. S. M. Mitra and
Mr. S. Krishna Swami Aiyangar

were elected members of the Society.

Mr. W. Irvine read a paper on "The Life of Niccolao Manucci, Venetian, chiefly from his unpublished Storia de Mogor."

II. Contents of Foreign Oriental Journals.

I. Zeitschrift der Deutschen Morgenländischen Gesellschaft. Band LVII, Heft 1.

Konow (Sten). Notes on the Maghī Dialect of the Chittagong Hill Tracts.

Mills (L. H.). Pahlavi Yasna XIV, XV, XVI, with all the MSS. collated.

Nestle (E.). Zur Geschichte der syrischen Typen.

Jacobi (H.). Ānandavardhana's Dhvanyāloka.

Mittwoch (E.). Ein Geniza-Fragment.

Ginsburger (M.). Die Fragmente des Thargum jeruschalmi zum Pentateuch.

Rothstein (J. W.). Zur Kritik des Deboraliedes und die ursprüngliche rhythmische Form desselben.

Scheftelowitz (J.). Altiranische Studien.

Horovitz (J.). Jawaddud.

——— Ueber den Einfluss des Stoicismus auf die Entwickelung der Philosophie bei den Arabern.

Horn (P.). Sâhnâme, 64, 48.

II. Vienna Oriental Journal. Vol. XVII, No. 1.

Krall (J.). Der demotische Roman aus der Zeit des Königs Petubastis.

Chalathianz (G.). War Artasches von Armenien der Besieger des Krösus?

Stackelberg (R. v.). Beiträge zur persischen Lexikographie.

Chalatianz (B.). Der Ursprung der armenischen Fürstentümer.

Winternitz (M.). Der Salhāparvan in der südindischen Rezension des Mahābhārata.

III. Obituary Notices.

Sir James Macnabb Campbell, K.C.I.E.

A large circle of friends, both in Europe and in India, will have heard, with more than ordinary sorrow, of the death of Sir James Macnabb Campbell, K.C.I.E., on the 26th May last, at his residence, Achnashie, Rosneath, N.B.

Sir James Campbell was a son of the late Rev. J. M. Campbell, D.D. He was educated at Glasgow, at the Academy and the University; and his attainments as a scholar were, in the course of time, duly recognised by his University, in conferring upon him the degree of D.C.L. He entered the Indian Civil Service in 1869, and was posted to the Bombay Presidency. He served, in the ordinary course, as an Assistant Collector and Magistrate, in the Khandesh and Kolaba districts and at Bombay, from 1870 to 1873. For some months in 1877, he was on famine duty in the Bijapur district,—the Kaladgi district, as it was then called. In 1880, he acted for a time as Municipal Commissioner of Bombay, and as Under-Secretary to Government in the Political, Judicial, and Educational Departments. In 1881, he attained the rank of Collector and District Magistrate, in which capacity, for the most part, he served until 1897, excepting during three periods of absence from India on furlough, at Bombay itself, and in the Panch-Mahals with the additional duties of Political Agent for the Rewa-Kantha State. In 1895 and 1897, he officiated as Commissioner of Customs, Salt, Opium, and Abkari. And finally, in July, 1897, in succession to Major-General Sir William Gatacre, K.C.B., he became Chairman of the Bombay Plague Committee. He left India on furlough in April, 1898. He received his promotion to be substantive Second Grade Commissioner in February, 1900, while he was still on furlough. And, without returning to India, he retired from the Service very shortly

afterwards. He was appointed a Companion of the Indian Empire in January, 1885, and a Knight Commander of the same Order in June, 1897.

Such, in brief outline, were the chief features of his ordinary official career. The great work of his life, however, was done in connection with the official Gazetteer of the Bombay Presidency. He was appointed Compiler of the Gazetteer in June, 1873. And he held that office until August, 1884, discharging during part of that period the duties of some additional offices also, as indicated above. His formal appointment as Compiler of the Gazetteer then came to an end. But he still retained the general superintendence of the compilation. And, with the exception of vol. vii, Baroda, and vol. viii, Kathiawar, all the volumes of the series were written and issued, between 1877 and 1901, and for the most part before the end of 1886, under his direction and auspices, as shewn by his signature below the introductory note to each of them. It is difficult to know which to admire most; the monumental character of the work, which consists of twenty-six large volumes, comprising altogether thirty-four parts, of which each is a separate book by itself, containing an enormous amount of information of the most varied and useful kind; or the unremitting energy, and the great tact, with which Sir James Campbell played his part in connection with it. Great tact was necessary; because much of the matter included in these volumes had necessarily to be prepared, subject to direction and revision by the Compiler, by, for the most part, district officials, already sufficiently tasked by their ordinary duties, whose hearty co-operation in this additional labour was largely ensured by the knowledge that they were working for a personal friend who would fully appreciate their results and would not exercise any unnecessary editorial interference with them. And unremitting energy was necessary; because, in addition to checking and, when necessary, recasting the many contributions obtained in the manner indicated above, Sir James Campbell had to write in person a great deal of the

matter included in most of the volumes, particularly in the ethnological divisions. It was the happy combination of the two qualities that enabled Sir James Campbell to carry his task to so successful an end, and to leave behind him a work which reflects honour both upon him and upon all the others, whether official or non-official, who took part in it; for a full list of those others, and for Sir James Campbell's cordial recognition of the value of the work done by them and by the members of his own official establishment, with an account of the whole scheme from its inception to its realisation, reference may be made to the introduction to vol. i, part i; the completion of that volume, which contains the special historical contributions, was wisely deferred as long as possible, and the two parts of which it consists were issued in 1896.

It is in connection with the Gazetteer of the Bombay Presidency that the literary achievements of Sir James Macnabb Campbell will be best remembered. It may be added, however, that he found leisure to write an interesting account of the history, from A.D. 1400, of Mandu or Mandogarh, a large deserted town on a hill of the Vindhya range, in the Dhar State, Central India, which was formerly the capital of the Muhammadan kingdom of Malwa; that article was published in vol. xix (1895–1897), pp. 154 to 201, of the Journal of the Bombay Branch of the Royal Asiatic Society. And it is further to be remarked that, in 1892 or 1893, his attention became greatly attracted to the subject of Indian demonology; with the result that the volumes of the *Indian Antiquary* from 1894 to 1901 contain a succession of interesting contributions by him, entitled "Notes on the Spirit Basis of Belief and Custom." It would appear that some of the notes of this series are still on hand, unpublished. And it is to be hoped that they have been received in a sufficiently far advanced state for the issue of them to be completed satisfactorily.

It is a pleasure to look back to long and friendly intercourse with Sir James Macnabb Campbell; and to recall the kindly hospitality that used to be dispensed by the

three brothers, John, James, and Robert, at their residence at Breach Candy, Bombay. It is sad to have to realise that excessive work, acting upon a constitution which was never very strong, has ended in the death, at the comparatively early age of fifty-six, of one whose personal qualities had endeared him to so many people, and whose scholarship would, if he had been spared for a longer time and with health and strength, have undoubtedly given us still more matter worthy of perpetuation.

J. F. FLEET.

Dr. F. J. Steingass.

THE distinguished lexicographer Francis Joseph Steingass died early in January of this year. He was not a member of our Society, and he appears to have been a man of retiring habits, but his name is well and favourably known to all students of Persian. His Dictionary is undoubtedly the best we have, and is a most handy and trustworthy work. It is founded upon Richardson, just as Richardson is founded upon Meninski; but Dr. Steingass, while reducing the Arabic portion, has added much valuable matter from the great lexicon of Vullers and from native dictionaries. He is also the author of an Arabic Dictionary, and he translated for the O.T.F. the last twenty-four Assemblies of Ḥarīrī, thus completing the work begun by Professor Chenery. He contributed several articles to Hughes' Dictionary of Islam, and among them is an elaborate account of Oriental Writing. He also, as Mr. Hughes has acknowledged in his preface, made a careful revision of the whole work.

Dr. Steingass was born at Frankfort-on-Main on March 16th, 1825, so that when he died he had nearly completed his 78th year. He graduated at the University of Munich, and came to England about thirty years ago. For five years he was Professor of Modern Languages at the Wakefield Grammar School, Birmingham, and he was afterwards a Professor at the Oriental Institute, Woking. It is stated, in an interesting letter in the *Times* of January 13th last,

to which we are indebted for the substance of this notice, that Dr. Steingass was almost entirely self-taught, and that he knew at least fourteen languages. We shall conclude by quoting two interesting remarks from the preface to his Persian Dictionary. One is that Persian is so deeply imbued with Arabic, that sooner or later the student of Persian must become a student of Arabic also. The other is:—"This Dictionary is not and cannot be complete. The complete dictionary of any language has yet to be written. It far exceeds the powers of any single individual, and depends for its realisation on the modest, although imperial, motto, *viribus unitis*. The author's only ambition was to advance the work close to the point at which the practical adoption of this motto, with regard to Persian, becomes a necessity, and should be seriously contemplated by Oriental societies and congresses."

We commend these words, and also some similar remarks of Mr. Blochmann in his "Contributions to Persian Lexicography," J.A.S.B., vol. xxxvii, and of Professor Browne in this Journal, to the consideration of members of Oriental congresses.

H. B.

IV. Notes and News.

Adam's Peak (Ceylon) in 1902. — The history of Adam's Peak (named by the Singhalese Aukanagau, the sky league) is well known, especially from the account in Sir James Emerson Tennant's *Ceylon*, 1860. But as the present condition is very different from the idea one takes from the drawing and plan in that work, it may be of interest to place on record the annexed sketches of the spot as it now is. The pagoda-like canopy (C) is supported on slender columns and open on all sides, and has now two entrances, whilst formerly there was

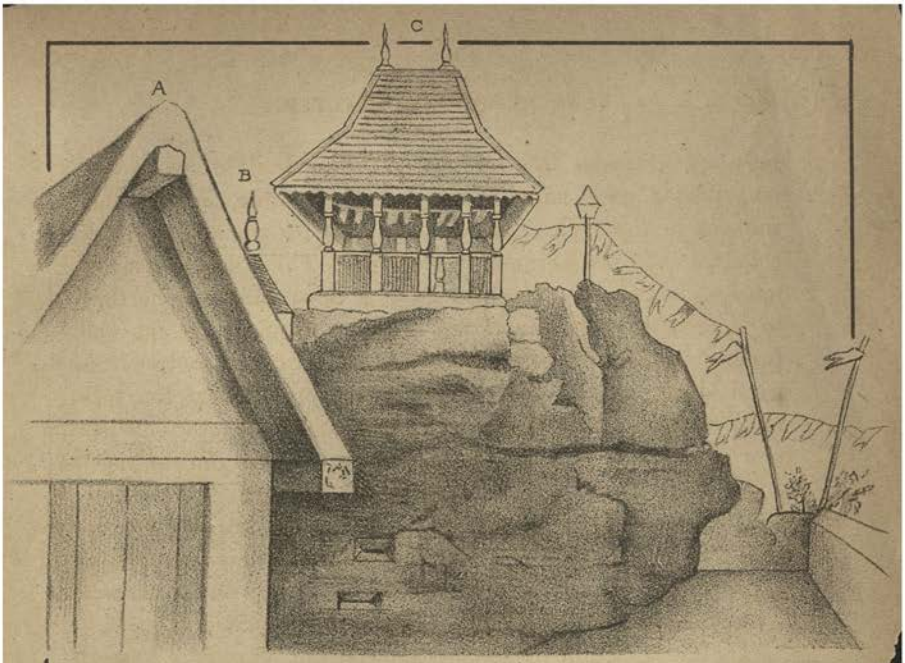
only one. Under this canopy, which is built of wood and embellished with small white and red flags, is the foot-imprint in the rock. The rock is of a brown and blackish colour, and in places much worn away. There are, moreover, marked instances of repairs having been made from time to time with cement and red bricks, especially at the end furthest away from the heel. The heel of the footprint is particularly well preserved, but the impression of the toes is now built over by the N.N.W. wall of the canopy. What now remains visible is only the impression of the heel end of the foot. The measurement of this itself is now 5½ feet long by 2¾ feet broad, and it varies in depth from 3 to 6 inches. To this pagoda-shaped canopy has been added a projecting roof to the N.N.W. side, and a small terrace with steps leading to the base of the larger terrace.

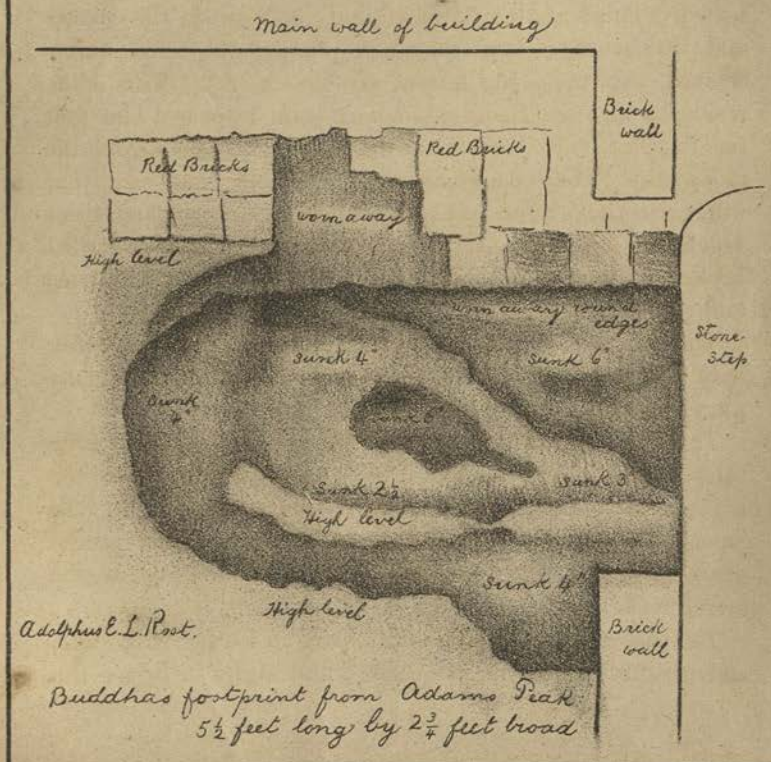
Another addition to the buildings on the summit is a small shrine (B) containing a small marble figure of Buddha seated. This building, situated midway between the canopy and the house, is constructed of plaster and wood white-washed, shown on the left of my sketch (A). This is the residence of four Buddhist monks, who informed me that for the last four years they had not descended from the mountain. They complained of the cold, but said that otherwise they were quite happy and contented, and spent much time in study. They showed me their palm-leaf books, and were most hospitable, presenting me with hot tea and rice.

The terrace around the rock is about 50 by 30 feet, with very irregular walls from 3 to 4 feet high; but in many places the walls are rapidly going to decay.

The iron chains fixed against the rock, some 30 feet from the summit, are relics of so great antiquity that in the legends of the Mahometans they are associated with the name of Alexander the Great, are still there, and are of great service to enable pilgrims to reach the top of the sacred rock.

The pathway up the mountain is still in a very wild state, and most difficult of ascent. The finest sight is to see the





Buddhas footprint from Adams Peak
5½ feet long by 2¾ feet broad

sun rise from the summit and the shadow of the mountain cast on the surrounding country.

It may be of interest to many that in making my way up the mountain I repeatedly came across unmistakable traces of elephants having tramped around the neck of the mountain.

ADOLPHUS E. L. ROST
(late of Ceylon).

THE FAR EAST.—The report of the French Oriental School in the Far East for 1901 has just been issued by the acting director, M. Alfred Foucher. It is a very satisfactory and encouraging document, and reflects great credit on the administration of French Indo-China. The library has been greatly increased in the course of the year, especially in the department of Chinese. The number of inscriptions deposited in the Museum has a little more than doubled; and a large number of sculptures, paintings, vases, bronzes, coins, and medals have been added to the collections. The books published during the year amount to six, not including either the report for 1900 or the annual volume of transactions; and it may be said of each of them that they are a distinct adddition to our knowledge. M. Finot, the director, returned early in the following year from leave of absence, and took charge again on January 24th, 1902. The great value of the work done is no doubt due as much to his organising ability in the past as it is to the excellent manner in which the acting director was able to carry on the traditions he received; and we beg to congratulate both these gentlemen on the result.

THE CHĀNDOGYA UPANISHAD.—Dr. Pfungst points out in "Das Freie Wort" for May that a translation of this Upanishad into German, from the Perso-Latin of Anquetil du Perron, was published at Nürnberg already in 1808. The author was Thaddä Anselm Rixner, Professor of Philosophy in the Lycæum at Passau. Schopenhauer worked at his "Die Welt als Wille und Vorstellung" for

four years, from 1814 onwards; and refers in his preface to such of his readers as might be already acquainted with the ancient pantheism of the East. It is very probable, therefore, that he had this now exceedingly rare little book in his mind. In any case it is undoubtedly the oldest extant translation of any Upanishad into a European language.

MR. VINCENT A. SMITH, M.A., has resigned his appointment as Reader in Indian History and Hindustani in the University of Dublin, with effect from the end of the current academic year.

THE Royal Asiatic Society, being desirous to give a greater attention than it has hitherto been able to do to the study of Far Eastern questions, is considering the advisability of printing such articles as are contributed to its Journal by scholars interested in the literature of China, Japan, Siam, and the adjoining countries in a separate publication, to be entitled

"THE FAR EAST."

It is proposed to issue *The Far East* at first every six months; and if the project should receive encouragement, then every quarter. Each issue will contain such illustrations as are necessary for the intelligence of the articles.

The co-operation of leading scholars has already been obtained, and a special committee has been appointed to deal with the details of the scheme.

Each issue will contain, besides original articles, also correspondence, paragraphs of notes and news, and reviews of books.

It is proposed, if sufficient subscribers be forthcoming, to commence with the issue of January, 1904; and the Society will be glad to know what support it will receive in this undertaking.

The *Far East* will be issued gratis to members of the Society. The subscription to the Society is, for those

fifty miles or more from London, 30*s.* a year. who would prefer to subscribe separately for *The st* can do so by a payment in advance of £1 in or ten dollars in China. Residents in China here who wish to support the Society in this king are requested to send their names to the ry, 22, Albemarle Street, London, W.

rs. Kelly & Walsh have been appointed sole agents a and Japan for *The Far East.*

V. Additions to the Library.

ed from the Royal Library, Windsor.

(S.). The Papyrus of Nas-Khem. 8vo. 1862 (?).

d by the India Office.

(E. D.) and Browne (E. G.). Catalogue of Two Collections of Persian and Arabic MSS. in the India Office Library. 8vo. *London*, 1902.

ham (Col. C. T.). Hymenoptera. Vol. ii. (Fauna of British India.) 8vo. *London*, 1903.

ns (Vet.-Capt. G. H.). Treatise on Elephants. 8vo. *Rangoon*, 1901.

eway (R. S.). The Portuguese Expedition to Abyssinia in 1541–1543, as narrated by Castanhoso, with some contemporary Letters, the short account of Bermudez, and certain extracts from Correa.

ted by the Ministère de l'Instruction Publique et des eaux Arts.

rain (G.) et Naville (E.). L'Aile nord du Pylône d'Aménophis III à Karnak.

et (A.). L'Exploration des Nécropoles gréco-byzantines d'Antinoe. (Annales du Musée Guimet, tome xxx, pts. 1, 2.) 4to. *Paris*, 1902.

Presented by the Panjab Government.

Maclagan (E. D.). Gazetteer of the Multan D
1901–1902. 8vo. *Lahor*

Presented by the Batavian Society of Arts and Sciences

Brandes (J.). Nâgara kratâgama. 8vo. *Batavi*

Presented by the Bombay University.

Mehta (N. D.). Vedanta Siddhanta Bheda.
8vo. *Bombay*

Presented by the Madras Government.

Sastri (M. Seshagiri). Descriptive Catalogue
Sanskrit MSS. of the Government Oriental
Library, Madras. Vol. i: Vedic Literature, p
8vo. *Madras*

Madras Government Museum. Bulletin, vol. iv,
Anthropology. 8vo. *Madras*

Presented by the Authors.

Stein (M. A.). Journey of Geographical and Archæo
Exploration in Chinese Turkestan.
8vo. *London*

Pathak (K. B.). Āpastamba and Baudhāyana.
Pamphlet. 8vo.

——— On the Jaina Poem Rāghavapāṇḍavīya.
Pamphlet. 8vo.

Lehmann. Zarathustra. 8vo. *Copenhagen,*

Lopes (D.). Toponymia Arabe de Portugal.
Pamphlet. 8vo. *Paris*

Beatson (Surgeon-Gen.). Plassy and Seringapa
a Comparison. Pamp

——— Indian Medical Service, Past and Present.
8vo. *London,*

Naville (E.). La Pierre de Palerme.
Pamphlet. 4to. *Paris,*

Pillai (T. P.). The Mine of Wealth in the State F
of Travancore, and what young Travancore c
to create industries.
Pamphlet. 8vo. *Trivandrum,*

llick (P. N.). History of the Vaisyas of Bengal.
8vo. *Calcutta*, 1902.
tz (H. F.). Handbook of the Kachin or Chingpaw Language. 8vo. *Rangoon*, 1902.
(Kali Kumar). Ta-she-sung, or the Holy Scriptures of the Rong. Pamphlet. 8vo.
och (J.). Suggested Triad of Coronation Boons to India. 8vo. *Vepery*, 1903.
lberg (Count C.). Die Hunde von ʿAzzān.
8vo. *München*, 1903.
hel (R.). The Home of the Puppet Play.
8vo. *London*, 1902.
ing (P. de). Trois traités d'Anatomie Arabes par Muḥammad ibn Zakariyyā al-Rāzī, ʿAli ibn al-Abbās, et ʿAli ibn Sīnā. Texte inédit de deux traités. Traduction. 4to. *Leide*, 1903.
schfeld (H.). Einige arabische Gutachten des Abraham Maimuni. Pamphlet. 8vo. *Berlin*, 1903.
erson (G.). On certain Suffixes in the Modern Indo-Aryan Vernaculars. Pamphlet. 8vo. *Gütersloh*, 1903.

d by the Publishers.

witz-Möllendorff (U. v.). Timotheos, die Perser, einem Papyrus von Abusir. 8vo. *Leipzig*, 1903.
(F.). Textes Religieux assyriens et babyloniens: scription, traduction, et commentaire.
8vo. *Paris*, 1903.
na (M.). Satvótpatti Vinischaya and Nirvána ra. Translated by H. M. Gunasekara.
8vo. *Colombo*, 1902.
). Buddhistic Essays, referring to the Abhid arma. Pamphlet. 8vo. *Colombo*, 1903.
öll (V.). Indian Mythology, according to the Mahābhārata. Luzac's Religious Series, vol. i.
8vo. *London*, 1903.
(G. van). Tria Oposcula auctore, Abu Othman r ibn Bahr al Jahiz. 8vo. *Lug.-Bat.*, 1903.

Presented by the Editor.

Gibb (E. J. W.). Ottoman Poetry. Vol. ii. Edit
E. G. Browne. 8vo. *London,*

Presented by the Deutschen Morgenländischen Gesellscha

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Gebiete des Deutschen, Griechischen, und Lat
Herausgegeben. Vols. i–xxxvii.

Jaina-rāmāyana of Hemachandra.

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THE ROYAL ASIATIC SOCIETY.

ART. XXII.—*Who was the Inventor of Rag-paper?*

By A. F. RUDOLF HOERNLE, Ph.D., C.I.E.

I PROPOSE, in this paper, to review briefly the present state of the question, and of the answer thereto. Within the last twenty years a great advance has been made with regard to it; and we owe this advance almost entirely to the researches of two savants, Hofraths Dr. J. Wiesner and Dr. J. Karabacek, both Professors in the University of Vienna. In the following review I shall state the results of those researches, together with such conclusions as appear to me legitimately deducible from them.

In 1877–8 a great find of ancient manuscripts was made in Egypt, at el-Faiyūm, in the ruins of the ancient Arsinoë (Crocodilopolis). Another find was made in el-Ushmūnein (Hermopolis), and a third in Ikhmīn. Most of the manuscripts of these finds ultimately (1884) came into the possession of H.I.H. Archduke Rainer of Austria; and they now form the famous collection known by his name. That collection contains upwards of 100,000 documents in ten languages, extending in their dates over a period of 2,700 years, from the fourteenth century B.C. to the fourteenth century A.D. Most of the manuscripts are written on papyrus, and some are on parchment; but the material of a large portion is paper. It is the latter, the paper manuscripts, with which we are here concerned.

The examination and classification of this mass of manuscripts were entrusted to Professor Karabacek, who in 1894

published an excellent "Guide to the Collection."[1] He called to his assistance a number of experts to deal with the various points of interest that presented themselves in the course of the examination. Their results were published from time to time in a series of learned dissertations.[2] The microscopical examination of the paper of the manuscripts was entrusted to Professor J. Wiesner, while the historical and antiquarian enquiry was undertaken by Professor Karabacek himself.[3] The results of their researches are such as to revolutionize some of the hitherto most unquestioned opinions regarding the material and the history of paper.

Hitherto the following points were accepted as established facts: (1) that the method of making paper from rags was only discovered in the thirteenth century, previous to that date all paper being made of raw cotton fibre; (2) that the art of making this raw cotton paper was learned by the Arabs from the Chinese in 704 A.D., when the former conquered Samarkand. The former of these supposed facts has been demolished by Professor Wiesner, and the latter has been subverted, or at least considerably modified, by Professor Karabacek.

In the two dissertations above cited, Professor Wiesner shows, as the result of a most laborious and minute investigation, by means of the microscope and chemical processes, of papers dating from the eighth century to modern times, that cotton fibre in its raw form has never, at any time, been used in the preparation of paper.[4] On the other hand, he

[1] *Führer durch die Ausstellung, mit 20 Tafeln und 20 Textbildern;* Wien, 1894.

[2] *Mittheilungen aus der Sammlung der Papyrus Erzherzog Rainer.* 5 vols. 1886–1892.

[3] Reports of Professor Wiesner: *Mikroscopische Untersuchung der Papiere von El-Faijûm*, in vol. i, p. 45; and *Die Faijûmer und Uschmuneiner Papiere, eine naturwissenschaftliche, mit Rücksicht auf die Erkennung alter und moderner Papiere und auf die Entwicklung der Papierbereitung durchgeführte Untersuchung*, in vol. ii, pp. 179–260. Reports of Professor Karabacek: *Das Arabische Papier, eine historisch-antiquarische Untersuchung*, in vol. ii, pp. 87–178; and *Neue Quellen zur Papiergeschichte*, in vol. iii, pp. 75–123.

[4] Cotton fibre, in textile form, that is, extracted from cotton rags, indeed, Professor Wiesner found to be used, but in European manuscripts, and only in comparatively modern times.

has found that all the papers of the collection are made of rags. Moreover, practically all these rags have been found to be linen. Occasionally, indeed, a few fibres of cotton rags have been found mixed up with the mass of linen textile fibres; but this only shows that in the selection of the rag material for the paper manufacture, no very great care was exercised, so that occasionally a few cotton rags were allowed to pass in the mass of linen rags, when they were put into the vat to be turned into pulp.

Further, Professor Wiesner found that all the papers of the Erzherzog Rainer Collection were sized with starch-paste, as well as loaded with starch-flour. The object of sizing, at that time as in the present day, was to render the paper capable of being written on, and that of loading, to improve its quality. It was also found that the sheets of paper had been made in moulds with network bottoms, similar to the modern wire-moulds.

The earliest dated papers that Professor Wiesner examined were a letter of 874 A.D., a contract of 900 A.D., and a receipt of 909 A.D., all three written in Arabic. But there were also two letters which, though not dated, could with good reason be assigned to the year 791 or 792 A.D. It is thus shown that in the ninth and tenth centuries, and probably as early as the end of the eighth century, the Arabs were acquainted with the art of making paper from linen rags in network moulds, and of sizing and loading it with starch, that is, in fact, substantially with the whole method of paper-making as practised in Europe till the invention of paper-machines in modern times.

This being so, the puzzling question arises, how it ever came to pass that the legend of the raw cotton paper arose. It is all the more puzzling, as Professor Karabacek also shows that the Arabic tradition lends it no support whatever: the home of the legend is limited to Europe, where it strangely persisted until these latter-day investigations.

To this question Professor Karabacek gives what seems to be a very sufficient reply. He suggests, in effect, that the legend owes its origin to a misunderstanding. One of

the common mediæval names of paper is *charta bombycina*, or as it is also sometimes spelled, *bambycina*. Another well-known name of it is *charta damascena*. The latter name it received from Damascus, the place of its origin. Similarly paper made in Bambyce was called *charta bambycina*; but in later times this fact was forgotten, and seeing that the word *bombyx* was used as a name for cotton, and that by its colour and texture the paper which was commonly in use suggested that material to the eye and the touch of the observer, the idea arose that the paper was made of cotton, and agreeably therewith the name began to be spelled *bombycina*. The legend of the cotton paper, therefore, arose from a misunderstanding such as is not uncommon with regard to articles of merchandise. A name originally indicative of an article's locality of origin comes to be understood solely as indicating its material. Examples are satin and muslin, which are corruptions respectively of the Chinese Tsen-thung and the Arabic Mausil. These are names of localities; but that fact is entirely forgotten in the modern use of the terms satin and muslin, which now only indicate certain materials.

Bambyce is the Latin form of Mabaq, the old name of the town of Hierapolis, in Coelesyria, the capital of the Euphratian province of Constantine the Great. It lay close to the right bank of the Euphrates. In ancient times it possessed a flourishing industry of textile fabrics, especially of silks. The *vestes bombycinae*, or 'silken clothes (of Assyria),' were famous in antiquity. In its district the culture of the silkworm was carried on extensively, whence the silkworm and its product, silk, probably by a similar misunderstanding, received their Greek name of *bombyx*. Later on, the meaning of that name was more generalized, and came to mean 'cotton,' and thus by another misunderstanding, as has been shown, it gave rise to the legend of the cotton-paper. In course of time, owing specially to its being a frontier fortress between the warring Byzantine and Arabic empires, Bambyce declined, and Damascus took its place, in industrial celebrity. The paper of Damascus

ousted the paper of Bambyce; and though the name of bambycine paper continued to pass current by the side of that of damascene, its meaning, as indicative of a locality, was entirely forgotten, and it was taken to indicate merely the material of which damascene paper was made.

This explanation of the origin of the legend of cotton-paper, though otherwise very taking, has one difficulty. For the present, there is no direct evidence that paper manufacture was in any special way one of the industries of Bambyce. There is every reason to believe that paper-making was carried on, more or less, in all the more important towns of the Arab empire. That Bambyce was no exception to the rule is shown by the fact, brought to notice by Professor Karabacek, that the Ducal library in Gotha possesses a manuscript which states itself to be written in 601 Hijrah (1204 A.D.), in Mambij (Bambyce), by a certain *warrāq*, or 'paper-man,' that is, a person whose profession included both the making of paper (*warq*) and the copying on paper. This shows that Bambyce was a place in which paper-makers lived; but it is hardly sufficient to show that it was a place of paper manufacture in any special sense. Evidence, however, to this effect may yet be found. In the meantime, the microscopical and botanical investigations of Professor Wiesner have proved beyond doubt that, however the legend of cotton-paper may have arisen, paper made of raw cotton fibre has never existed. Seeing that even modern paper manufacture, with all its improved appliances, abstains from the use of raw cotton, as being a too impracticable material, it is indeed difficult to understand how it could have been used by the ancient paper-makers with their primitive methods.

We have seen that the Arabs knew the art of making paper from linen rags in the eighth century A.D. It is well known and generally admitted that they learned the art from the Chinese. The question is, what is the exact date of their learning it. The date hitherto accepted has been the year 704 A.D., in which year Samarkand is said to have been conquered by the Arabs, and the art of

paper-making taught them by Chinese prisoners captured on that occasion. This, as Professor Karabacek shows, is a complete fiction, based on a misunderstanding and confusion, originally due to Michele Casiri, of two entirely disconnected Arabic notices. No Arab historian places any, even temporary, occupation of Samarkand in the year 704. On the contrary, in that year Samarkand was in the undisturbed possession of the Turki ruler of Sogdiana. The first so-called 'conquest' took place in 676 A.D., but it was a farce. The Arabs were permitted to march in by one gate and out by another. Though nominally conquered, the city remained closed to the Arabs. Its real conquest only took place in 712 A.D. by the celebrated Qutaiba. Later on, a war broke out between the Turki chiefs of Ferghana and Tashkend. The former appealed to China for help; this was sent, and with it Tashkend was subdued, which thereupon acknowledged Chinese supremacy. This result did not suit the neighbouring Arabs of Samarkand. Abu Muslim, the Abbaside governor of Khorasan, sent his lieutenant Ziyād ibn Ṣālih against the two Turki chiefs. A battle ensued at Aṭlah, on the Tharāz river, north-east of Tashkend, and the 'unbelievers' were utterly defeated and pursued to the Chinese frontier. Among the prisoners taken on this occasion and carried back to Samarkand, there were some Chinese who by profession were paper-makers. It was from these that the Arabs learned the art of paper-making. All this happened in the month of July of the year 751 A.D. This is the account of the events as related in Arabic chronicles; but, as has been shown by Professor Fr. Hirth,[1] it is fully confirmed by the Chinese chronicles of the Thang dynasty, down to the very date of the battle. There can be no doubt, therefore, that it was in 751 (not in 704) that the art of paper-making was introduced among the Arabs in Samarkand.

The question now arises, what kind of paper was it that those Chinese captives were able to make, and the making

[1] *Die Erfindung des Papiers in China*, p. 270, in his *Chinesische Studien* (Munich, 1890).

of which they introduced in Samarkand. Was it rag-paper, or any other? The Arab chroniclers say that it was 'grasses and plants' from which they made their paper. This does not seem to indicate that they used worked-up or woven fibres. It seems evident that what they used was raw fibre, and that their paper was not rag-paper in the ordinary sense. Professor Karabacek tries to reinforce this conclusion by another argument, drawn from the word *kāghadh* (or, as pronounced in India, *kāghaz*), by which paper came to be known among the Arabs. Papyrus, which they first used, was called *qarṭās*; but when paper was introduced among them it was distinguished as *kāghadh*. Now *kāghadh* is not Arabic, but is said to be a loan-word from the Persian. But Professor Hirth has proved (*l.c.*, p. 269) that it is really a Persian loan-word from the Chinese. He has found in a Bukhariote-Chinese Dictionary the statement that *kāghadh* is the same as the Chinese *kok-dz'*, which latter word, Professor Hirth says, means 'paper made of the bark of the mulberry-tree' (*Broussonetia papyrifera*, Vent.). From this Professor Karabacek draws the two conclusions, (1) that the material intended by the expression 'grasses and plants' was (chiefly, if not entirely) the bark of the mulberry-tree, and (2) that the name *kāghadh* originated on that occasion, in 751, when paper manufacture was introduced in Samarkand by the Chinese prisoners. The paper, he argues, which was thus introduced among them, the Persian-speaking population naturally called by the Chinese name *kok-dz'*, or, as they pronounced it, *kāghadh*. A serious difficulty, however, disclosed itself at once. The paper mulberry tree does not grow in Western Turkestan; and, considering the hostile relations of the Arabs to the Chinese, there were obvious difficulties in the way of procuring the needful supply of the material from China. The people of Samarkand were, of necessity, forced to cast about for a substitute. Western Turkestan was a country with an extensive cultivation of cotton; and it is not impossible that the Samarkandis may, in the first instance, have had recourse to the use of raw

cotton fibre; but whether or not they did so (there is no evidence whatsoever on the subject), the experiment must have shown at once the utter unsuitability of that material. At any rate, Professor Wiesner's researches have proved that, as a fact, raw cotton fibre has never formed the basis of paper. On the other hand, they have shown that linen rags invariably were the material from which the paper of Samarkand was made. It is evident, therefore, that linen rags were the substitute which the Samarkand paper-makers adopted to supply the want of the bark of the mulberry-tree. The query, however, still remains, what was it that suggested this substitute to the Arabs, or, as we should rather say, to the people of Samarkand? For there is no obvious connection between mulberry bark and linen rags. This query, apparently, did not suggest itself to Professor Karabacek; in any case, it is neither stated nor answered by him.

As to the name *kāghadh*, it appears to be assumed by Professor Karabacek that it originated in or about the year 751, at the time when the Arabs commenced their paper manufacture in Samarkand. It is an assumption, which may be true, but it has not yet been proved. Indeed, some facts are mentioned by Professor Karabacek himself which rather make against it. Nor do the general probabilities seem to be in favour of it. It is well known that a fairly active trade intercourse existed between China and the western Persian-speaking countries of Asia. It can hardly be doubted that Chinese paper would form one of the articles of trade, or at least reach those countries in connection with their trade transactions with China. As a fact, Professor Karabacek notes several cases of Chinese paper being known to the Arabs at a much earlier date than 751 A.D. According to him, the earliest mention of paper as an import from China to Samarkand refers to the year 30 H. or 650–1 A.D. Again, the second Khalif 'Omar is said to have been the first who used paper for writing in Mecca. This can only have been Chinese paper, and the date is 88 H. or 707 A.D. The Chinese paper, which thus came into Persian-speaking

countries and fell into Arab hands, must have been known among them by some name, and it is quite possible that that name was *kāghadh*, the Persian corruption of the Chinese *kok-dz'*. It is evident, then, that the origin of the name may very well be of a much earlier date than 751 A.D. The Arabs knew of Chinese paper; they probably knew it by its Persian name *kāghadh*, and the practical usefulness of it they, no doubt, fully appreciated. When, then, on the capture of the Chinese professional paper-makers in 751, the chance presented itself of introducing the art of making it into their country of Samarkand, it cannot surprise that, practical people as they were, they at once proceeded to profit by it. When once produced within their own borders, the article, of course, became much more common among them, and its name *kāghadh* proportionally more familiar. This, in any case, is a natural explanation of all the facts of the case; and the opposite theory that the name *kāghadh* only originated in 751, at the time of the introduction of the art of paper-making in Samarkand, can only be admitted on proof of it being given.

The argument from the word *kāghadh*, then, seems to me to fail as an evidence to show what the 'grasses and plants' were from which, as the Arab historians tell us, the Chinese captives in 751 A.D. made their paper. What the word undoubtedly does show is that the Chinese paper, which in the course of trade reached the western countries, and from which the Persian, and subsequently Arabic, term *kāghadh* originated, was *kok-dz'*, or 'paper made of the mulberry bark.' But the origin of the word is probably of a much earlier date than 751 A.D., and the word itself proves nothing regarding the identity of the 'grasses and plants' of 751 A.D. For the Chinese, as is well known, made paper of a variety of raw fibres; and those 'grasses and plants' may very well have been other fibres than those of the mulberry-tree.

At this point come in those new discoveries of ancient paper which have recently been made in Eastern Turkestan. The earliest Arab, or rather Samarkandi, paper which Professor Wiesner has examined dates from about 791–2;

and this, as he found, was made entirely of rags, that is, of worked-up or woven fibres. Of raw fibres he discovered no trace in it. On the other hand, as we now know, thanks to Professor Karabacek's researches, the Arabs learned the art of paper-making in 751 A.D. There is here a gap of about forty years; within that interval the Arabs must have passed from the use of 'grasses and plants' to that of rags. If we had any Samarkandi paper, made in 751 or in some year near to that date, which could be examined by Professor Wiesner's methods, the identity of the 'grasses and plants' could be at once and indubitably established. Or, failing Samarkandi paper, if we had Chinese paper of that precise date, the identity of the 'grasses and plants' which the captive Chinese paper-makers used could also be established. Now it so happens that Chinese papers of that precise date are included among the discoveries in Eastern Turkestan. These discoveries have been described in my Report as well as in Dr. Stein's Preliminary Report.[1] Among the manuscripts dug out from the sand-buried site of Dandan Uiliq, there are, in addition to many others which are not dated, five Chinese documents dated in the years 768, 786 (my Report, p. 23), 781, 782, and 787 (Dr. Stein's Report, pp. 39, 40). All these manuscripts fall into the interval in question, 751–792 A.D.; and they should show what materials were used at that time by the Chinese paper-makers in the countries adjoining Western Turkestan. Accordingly specimens of these papers, together with specimens of most of the other manuscripts discovered in Eastern Turkestan, were submitted by me for examination to Professor Wiesner. His results have been published by him in a report submitted to the Imperial Academy of Sciences of Vienna.[2] They show that the

[1] My *Report on the British Collection of Antiquities from Central Asia* has been published as part ii, extra number 1 of the Journal of the Asiatic Society of Bengal, vol. lxx, 1901. Dr. Stein's *Preliminary Report on a Journey of Archæological and Topographical Exploration in Chinese Turkestan*; London, 1901.

[2] *Microscopische Untersuchung Alter Ost-Turkestanischer Papiere*, in vol. lxxii of the Denkschriften der Mathematisch-Naturwissenschaftlichen Classe of the Academy. This report refers to the papers comprising my collection described in my Report. Professor Wiesner's report on Dr. Stein's papers has not yet

Chinese paper of that period in Eastern Turkestan was made of a mixed material, viz., of a mixture of certain raw fibres with rags. The raw fibres proved to be (speaking roughly[1]) those of mulberry, laurel, and China-grass; and the rags were of flax, hemp, or China-grass. Moreover, it was found that the main constituent of the paper were raw fibres, while the rags served as surrogates. We can now see what those 'grasses and plants' must have been of which the Chinese captives taught the Samarkandis to make paper. They were the fibres of China-grass and of the bark of mulberry and laurel trees. But there is another point which we also learn, that these 'grasses and plants' did not form the sole material of that early Arab, or Samarkandi, paper, but that more or less of macerated rags and ropes (linen, hempen, or others) was mixed with it. That these surrogates are not named by the Arab historians in their vague statement of the paper material is, in the circumstances, not more than might be expected. But they form the missing link between the Chinese and the Arab paper. They explain how it was that the sole use of rags in paper manufacture suggested itself to the Arabs. Originally, as taught by their Chinese instructors, they used a mixture of macerated raw fibres and rags. Gradually, as the raw fibre, especially that of the mulberry-tree, gave out, they increased the substitution of rag-fibres; and as they must have soon discovered that this substitution answered very well, they finally ended by limiting themselves entirely to the use of woven or worked-up fibres, contained in rags, ropes, nets, and such like material, mostly linen, which could be obtained by them in large quantities.[2] This, as I take it, is the real origin of the so-called rag-paper. To the Arabs, or rather Samarkandis,

been published; but the Professor has informed me privately that the results of the examination of these papers confirm in all respects those of the examination of my papers.

[1] A more accurate statement will be found below, p. 683, in the translation of Professor Wiesner's *Summary*.

[2] The Arabs wore linen clothes. With the growth of the paper industry a large trade sprang up in linen rags; and in Egypt the cemeteries began to be ransacked and the mummies despoiled of their linen coverings.

belongs the credit, not of discovering the use of rags or worked-up fibres, but (what certainly is of sufficiently great importance) of limiting themselves to it entirely; that is to say, they have the credit of the invention of *pure* rag-paper.

In passing, it may be noted that Professor Wiesner's researches further show that the processes of 'sizing' and possibly 'loading' also were already known to the Chinese makers of Eastern Turkestani paper. These processes were not discovered by the Arabs, or Samarkandis, but taken over by them from their Chinese instructors.

The above suggested evolution of the art of paper-making is altogether supported by the Chinese tradition on the materials used by them in their paper manufacture.[1] That tradition, as Professor Fr. Hirth tells us (*l.c.*, pp. 259–271),[2] says that Ts'ai Lun, about 105 A.D., discovered the method of making paper from the bark of trees, hemp, rags, and fishing-nets. Here we have a distinct statement of two classes of material, which, as a fact, Professor Wiesner has discovered to be really the constituents of Chinese paper in the eighth century A.D., namely, the raw fibres of 'bark and hemp' and the worked-up fibres of 'rags and fishing-nets.' I believe the statement of the Chinese tradition has usually been understood to indicate three alternative materials of paper, namely, that paper was made either of bark, or of hemp, or of rags and fishing-nets; but Professor Wiesner's researches show that the tradition is speaking rather of a mixture of materials: bark, hemp, and rags were mixed to form the pulp of the paper. The tradition does not refer to any pure rag-paper, but only to mixed rag-paper, similar to that discovered in Eastern Turkestan. From

[1] I may here mention a curious evidence of the trustworthiness of Chinese tradition. Among other things used in Chinese paper-making, it names lichen. This apparently is a most unsuitable substance, and the statement of its use has been looked upon with great distrust. But Professor Wiesner has discovered that, as a fact, lichen was used in the manufacture of some of the ancient Eastern Turkestani paper, which he examined, for the purpose of sizing it.

[2] The subject of the invention and development of paper-making by the Chinese, however, deserves a thorough re-examination by Chinese scholars in the light of Professor Wiesner's recent researches.

Professor Wiesner's researches we may also conclude what the 'bark and hemp' were. In 'bark,' no doubt, was included the inner bark or bast of the mulberry and laurel trees, and 'hemp' included flax and China-grass. Again, 'rags and fishing-nets' included material made of flax, hemp, and China-grass.

Though it is quite evident that anciently paper was made in China from a mixture of materials, it is quite intelligible that the constituents of the mixture and their relative amount in the mixture may have varied in different provinces of the Chinese empire. Accordingly, as Professor Giles informs me in a letter (dated 6th November, 1899), it is said that "in Ssŭch'uan hemp was used for making paper, in Fuhkien bamboo, in the North mulberry-bark, in Kiangsu rattan, on the sea-coast lichen, in Shehkiang husk of grain, in Central China silk, and in Hupeh *Broussonetia papyrifera*, Vent."[1] This, no doubt, does not mean that in the provinces named paper was made entirely from the particular substances allotted to them, for it is very improbable that, e.g., from lichen by itself any paper could be prepared. What is meant is evidently that those substances formed the principal or a peculiar constituent of the paper-pulp in their respective provinces. Now the point to be noted in the allotment of the articles is that mulberry-bark is attributed to the 'North' of China. It is Northern China, especially its north-western province, Kansu, which directly adjoins Eastern Turkestan, and it is through the latter country that the two famous trade-routes passed which connected China with the 'western countries' of Asia. It would primarily be paper made in Northern China—that is, mulberry-paper—which would be carried in the course of trade to Eastern Turkestan, and thence to the western countries. Mulberry-paper, as we know from Professor Hirth's researches, was called *kok-dz'*; and thus we see how it came to pass that in the Persian-speaking western countries, and thence among the Arabs, Chinese paper came to be known as *kāghadh*. This also

[1] Quoted from the *Pên-tsao-kang-mu* or Materia Medica.

serves to explain the circumstance that in the ancient Chinese paper discovered in Eastern Turkestan the raw fibre of the mulberry-tree has been found to form such a prominent constituent of its mixed material. The Chinese paper used in Eastern Turkestan would be paper made in Northern China, or, if made in Eastern Turkestan itself, would be made according to the fashion of Northern China, that is, it would be—as, in fact, it was found to be—in the main a mulberry-paper. In connection herewith, as a corroborative circumstance, it may be noted that in the Report of the Yarkand Mission[1] mulberry is enumerated among the 'common trees' of Eastern Turkestan.

It is a curious circumstance that, in the allotment passage above quoted, the China-grass (Ramie, *Boehmeria nivea*) should not be mentioned at all, while Professor Wiesner's investigations show that it was such an important constituent in the ancient Chinese paper of Eastern Turkestan. Possibly that extract, as given in Professor Giles' letter to me, may be not complete, or its enumeration of substances is not intended to be exhaustive; I am not in a position to verify the point. But the fact, as disclosed by the Eastern Turkestani papers, would seem to be that the fibres of both mulberry-bark and China-grass were common materials used in the paper manufacture of Northern China.

Thus far we have seen that the art of making paper from a mixed stuff consisting of raw fibres and textile fibres (as present in rags, nets, and the like), including the processes of sizing and possibly of loading, was already known to the Chinese in the eighth and preceding centuries. From them the people of Samarkand learned it through Chinese captives, carried there by the Arabs in 751 A.D. Owing to the failure of the raw fibres, the Samarkandis took to making paper solely from textile fibres. They thus became the inventors of what is commonly understood by 'rag-paper,' that is, paper made solely of rags. The rags used in the early

[1] *Report of a Mission to Yarkand in* 1873, *under the Command of Sir T. D. Forsyth, K.C.S.I., C.B.* Calcutta, 1875. See p. 75.

paper of Samarkand appear to have been exclusively linen. In any case, cotton, whether raw or woven, was never used either by the Chinese or the Arabs.

In addition to the difference of mixed and pure rag-paper, the Arab (or Samarkand) paper differed from the Chinese also in the manipulation of its material. Originally the Chinese used the method of 'stamping,' or pounding, the fibres in a stone mortar.[1] This rude process necessarily resulted in an excessive destruction of the fibrous tissue, and from the half-stuff thus obtained only an inferior kind of paper could be made, which would 'run' and could only be inscribed with a viscid ink. Later on, in the case of raw fibres, chemical processes of maceration were adopted for their extraction, and thus much better preserved fibrous tissue was obtained, capable of yielding an improved kind of paper. In the case of textile fibres, however, it appears the old rude method of stamping was retained. All this is clearly shown by Professor Wiesner's investigations. In the oldest papers of the fourth and fifth centuries he found the raw fibres, of which alone those papers were made, exhibiting every mark of having been obtained by stamping. In the subsequent centuries, when mixed papers already make their appearance, the raw fibres were often found so well preserved as to show that they were obtained by some chemical process of maceration, while the textile fibres still exhibited the marks of the primitive stamping process. On the other hand, in the Arab, or Samarkandi, paper of the Archduke Rainer Collection, which Professor Wiesner had previously investigated, he only found the textile fibres of rags; and these were so well preserved as to show that they were extracted by some chemical process. The conclusion, then, which may be drawn is that the Arabs extended the chemical process, which their Chinese instructors had only used with raw, but not with textile, fibres, also to the

[1] The mortar used by Ts'ai Lun (105 A.D.), the inventor of vegetable fibre paper, is said to have been still preserved as a curiosity in the time of the Thang Dynasty (618–907 A.D.). See Hirth, *l.c.*, p. 627.

extraction of the latter. The consequence was that they not only invented the pure rag-paper, but also improved the quality of their rag-paper.

This improvement had particular reference to the fitness of the paper for being written on. Half-stuff made of rudely stamped fibres (raw or textile) was only capable of producing paper which would 'run,' and could only be inscribed (or rather painted on) with some thick, or viscid, ink. On the other hand, fibres extracted by chemical process have a greater tendency to 'bind,' and thus produce paper much more susceptible of being inscribed with ordinary ink. This being so, the Chinese early cast about to discover means by which they could render their paper made of rudely stamped fibres susceptible of writing. One of the earliest methods, as Professor Wiesner's researches have shown, was to cover the surface of the paper with a thin coating of gypsum. The next was to render the body of the paper itself impermeable to a liquid by 'sizing,' or gluing, its half-stuff with starch. Sometimes, as Professor Wiesner has found, lichen was substituted for starch. A third method, apparently also used sometimes, was to 'load' the paper with starch-flour (especially of rice). The method of sizing with starch, however, was the usual and favourite one. It was the method which Professor Wiesner found used in the dated Chinese document of the year 768 A.D., above referred to. The same method he also found invariably used in the Arab, or Samarkandi, paper of the Archduke Rainer Collection. It is thus evident that the Arabs learned this method from their Chinese instructors, but in their hands it ensued in a further improvement of the paper, because the sizing with starch tended to reinforce the 'binding' property of their half-stuff, which it already possessed from being made of chemically macerated rags.

To sum up, the Arab paper possessed three advantages over the older Chinese paper: (1) it was made entirely of (linen) rags, the fibres of which rags (2) were extracted by chemical processes; (3) it was made susceptible of writing with ordinary ink by sizing it with starch glue. It is the

preparation of paper by this improved method which must be credited to the Arabs, or, as we should say properly, to the paper-makers of Samarkand, whoever they were.

Regarding the further history of the Samarkandi rag-paper, Professor Karabacek has shown that its spread beyond the country of its origin (Transoxania) into the rest of the Arab empire began in the year 794–5, when Ja'far, the Barmecide Wazīr of the Abbaside emperor Hārūnu-r-Rashīd, established the second paper factory in Baghdad. Thence the art quickly spread over the whole of the Abbaside empire, and factories arose in Persia, Arabia, Egypt, Syria, North Africa, and Spain. In the middle of the tenth century, paper had already become so common that it entirely displaced the use of papyrus. In 1035, we are told, it was such a common article in Egypt that the grocers of Cairo were in the habit of wrapping in it the goods which they sold to their customers. Each factory had its speciality. That of Damascus attained a particular celebrity, and it was principally from that place that paper, under the name of *charta damascena*, was imported into Europe. If Lichtenberg, whom Professor Karabacek quotes,[1] can be trusted, it was in the year 940 A.D. that rag-paper was introduced into China. This, of course, can only mean rag-paper in the sense of paper made entirely of rags, that is, Samarkandi or Arab paper. But the introduction of this paper, if it did take place, does not appear to have gained any permanent footing in China, for, as I understand, rag-paper (in the explained sense) is not made there even in the present day. On the other hand, rag-paper, in the sense of mixed rag-paper, as we have seen, was known to the Chinese from the very beginning of its invention by Ts'ai Lun, early in the second century A.D. Though even this does not seem to have been the beginning of the making of 'paper' in its proper sense. For 'paper' proper is a species of 'felting,' and is made on the same principle as ordinary felt: it is,

[1] From Lichtenberg's *Vermischte Schriften*, v, 508–510; in Karabacek, *l.c.*, p. 117. I am not in a position to verify the reference.

accordingly, an altogether different article from papyrus and parchment, which are made by quite different methods. Now the main point of Ts'ai Lun's invention was that he substituted vegetable fibres (of grasses, barks, rags, etc.) in the place of animal. He was, therefore, not the inventor of paper, but only of vegetable fibre paper. Before his invention, as early as the second century B.C. according to Professor Hirth (*l.c.*, p. 264), felt-like paper was made by the Chinese from 'silk-waste.' This silk-waste (*hsü*) appears to have included both raw and woven silk; and thus even this early silk-paper of the Chinese may be said to have been mixed rag-paper.

Finally, the art of preparing felt (as distinguished from spun or woven cloth) from the wool of their herds, for use as clothing or tent-covers, seems to have been known from immemorial times as a national industry among the nomad tribes of Central Asia. Hence it appears probable[1] that it was the felt of those nomads that suggested to the Chinese the idea of making felt-like paper from the silk of their own country. Previous to the invention of (felt-like) paper the Chinese are said in their own records (Hirth, *l.c.*, pp. 262, 266) to have used wooden splints, or slips of bamboo, for the purpose of writing. In this respect the Chinese records are fully confirmed by the recent explorations of Dr. Stein in Eastern Turkestan. In the oldest settlements on the Niya River site[2] Dr. Stein discovered numerous wooden tablets and splints, inscribed with Kharoṣṭhī and Chinese letters, but no paper of any kind. The occurrence of Kharoṣṭhī writing on them proves their great age; and that their date may possibly go back to as early as the second century B.C. is indicated by the Chinese statement about the invention of silk-paper at the end of that century. The latter statement thus in its turn serves to define more accurately the possible date of the Niya documents.

[1] See Dr. G. Jacob, in *Oestliche Culturelemente im Abendland*, p. 16.

[2] See Dr. Stein's *Preliminary Report of Archæological and Topographical Exploration in Eastern Turkestan*, pp. 43 ff.

In conclusion, I may add a translation of the summary of the principal results of Professor Wiesner's examination of the ancient papers discovered in Eastern Turkestan (*l.c.*, pp. 631, 632). It runs as follows:—

"Taking into account the dates assigned to the papers on palæographic grounds, the following conclusions may be drawn from the examination of their material:—

"(1) The oldest of the Eastern Turkestani papers, dating from the fourth and fifth centuries A.D., are made of a mixture of raw fibres of the bast of various dicotyledonous plants. From these fibres the half-stuff for the paper was made by means of a rude mechanical process.

"(2) Similar papers, made of a mixture of raw fibres, are also found belonging to the fifth, sixth, and seventh centuries. But in this period there also occur papers which are made of a mixture of rudely pounded rags and of raw fibres extracted by maceration.

"(3) In the same period papers make their appearance in which special methods are used to render them capable of being written on; viz., coating with gypsum, and sizing with starch or with a gelatine extracted from lichen.

"(4) In the seventh and eighth centuries both kinds of papers are of equal frequency: those made of the raw fibre of various dicotyledonous plants and those made of a mixture of rags and raw fibres. In this period the method of extracting the raw fibre is found to improve from a rude stamping to maceration; but that of preparing the rags remains a rude stamping, and in the half-stuff thus produced from rags it is easy to distinguish the raw fibre from the crushed and broken fibre of the rags.

"(5) The old Eastern Turkestani (Chinese) paper can be distinguished from the old Arab paper not only by the raw fibres which accompany the rag-fibres, but also by the far-reaching destruction of the latter.

"(6) The previous researches of Professor Karabacek and the author had shown that the invention of rag-paper was not made in Europe by Germans or Italians about the turn

of the fourteenth century, but that the Arabs knew its preparation as early as the end of the eighth century.

"The present researches now further show that the beginnings of the preparation of rag-paper can be traced to the Chinese in the fifth or fourth centuries, or even earlier.

"The Chinese method of preparing rag-paper never progressed beyond its initial low stage. It was the Arabs who, having been initiated into the art by the Chinese, improved the method of preparing it, and carried it to that state of perfection in which it was received from them by the civilized peoples of Europe in the mediæval age.

"(7) The author has shown that the process of sizing the paper with starch in order to improve it was already known to the Arabs in the eighth century. In the fourteenth century the knowledge of it was lost, animal glue being substituted in the place of starch; till finally in the nineteenth century, along with the introduction of paper-machines, the old process was resuscitated. But the invention of it was due to the Chinese. The oldest Eastern Turkestani paper which is sized with starch belongs to the eighth century.

"(8) The Chinese were not only the inventors of (felted) paper and the initiators of rag-paper — though in the preparation of the latter they made use of rags only as a surrogate by the side of raw fibres—but they must also be credited with being the forerunners of the modern method of preparing 'cellulose paper.' For their very ancient practice of extracting the fibre from the bark and other parts of plants by means of maceration is in principle identical with the modern method of extracting 'cellulose' by means of certain chemical processes.

"(9) The exact identification of the plants from which the fibres were obtained was beset with great difficulties, owing to the fact that all the fibres of the ancient papers under investigation are derived from the inner bark of dicotyledonous plants; and, as a rule, all 'accessory guiding indications' which might have helped to identify the

particular dicotyledon were absent. Subject to these limitations, it was possible to prove the presence among the rag-fibres of those of *Boehmeria*, flax and hemp, and among the raw fibres of the bast-cells of *Boehmeria*, *Moraceæ*, and *Thymelaceæ*. There were, however, a few kinds of bast-fibre which it was altogether impossible to identify."

P.S.—Since the above article has been in print, I have come to know a paper on the same subject by Dr. R. Garnett, published in the January Number, 1903, of the *Library*, pp. 1–10. It gives an excellent summary of the researches of Professors Karabacek and Wiesner, noticing some interesting particulars which, from the point of view of my article, were immaterial, and consequently omitted by me. On one point, however—very material to my argument—I see that Dr. Garnet offers a different suggestion. That point refers to the question, how the Samarkandis came to substitute linen rags for the raw fibres which had been used by the Chinese: see *ante*, pp. 669, 670, 673, 676. On p. 5 of his article, Dr. Garnett says: "The Arabs and their assistants [in default of the raw fibres used by the Chinese] resorted to flax, which grows abundantly in Khorasan, and made their paper from the fibres of the plant, and afterwards from rags, supplemented, as the demand increased, with any vegetable fibre capable of serving the purpose." Again, on p. 10, "It may be doubted whether the higher credit be due to the ingenious man who first thought of the flax of Khorasan as a substitute for the Chinese material, or to him who augmented this source of supply by recourse to rags."

I do not know of any evidence showing that flax ever grew abundantly in Khorasan. At the present day, certainly, it does not grow so there; cotton does. In the *Encyclopædia Britannica* articles on Western Turkestan, Khorasan, Samarkand, etc., flax is not mentioned at all among the crops of the country. I doubt whether it was different in the eighth century; whether, indeed, flax was grown at all at that time. But whether, or not, the Samarkandis resorted,

at first, to the substitution of the raw fibre of flax, or cotton, or some other plant, and only *afterwards* to rags, Professor Wiesner's investigations certainly suggest, if they do not prove, that it was the fact of the Chinese using rags as a *surrogate* which suggested to the Samarkandis the use of them as the *sole* material in their paper manufacture.

As to Dr. Garnett's remark about the [linen] rags being supplemented with any vegetable fibre capable of serving the purpose, I suppose he refers to hemp. But, in any case, it was the worked-up fibre of hemp (as contained in rags, ropes, etc.), not the raw fibre; for Professor Wiesner's investigations have shown that Samarkand paper contains no raw fibres at all, but only fibres of rags (whether linen or hempen).

ART. XXIII.—*The Position of the Autonomous Tribes of the Panjāb conquered by Alexander the Great.* With a Map. By VINCENT A. SMITH, M.A., M.R.A.S., I.C.S. (retired).

FOR the right understanding of Alexander's Indian campaign it is essential to place correctly the nations called Malloi, Kathaioi, and Oxydrakai by Arrian, who were among the most formidable opponents of the invader. Mr. McCrindle, in his valuable work, "The Invasion of India by Alexander the Great" (new ed., 1896), seems to me to have gone wrong in this matter, and to have seriously misplaced all three nations. He has located the Malloi about one degree of latitude too far south, and, with respect to the Oxydrakai, his error, in my judgment, amounts to about three degrees. He has also failed to indicate correctly the position of the Kathaioi. I propose in this paper to examine all the evidence on the subject, and to try to establish the true approximate positions of the three nations on the map of ancient India.[1]

Although Sanskrit literature offers no material help in the task of localizing the nations called Malloi and Oxydrakai

[1] I desire to acknowledge in the most emphatic manner my indebtedness to the very learned paper, really a large work, by Major G. H. Raverty, Bombay Army retired, entitled "The Mihrán of Sind and its Tributaries," with nine plates, which appeared in the *J.A.S.B.* for 1892, part i. It is the only publication known to me which fully and practically recognizes the enormous scale of the changes in the courses of the Panjāb and Sind rivers since Alexander's time. Major Raverty pricks many bubbles, and has cleared away the rubbish of guess-work which has accumulated around the subject of Alexander's Indian campaign. His most valuable observations on this topic will be found at pages 155, 226, 244 (note 192), 246, 250, 252, 304, 307, 313, 343 (note 345), 345 (note 348), 351 (note 353), especially 362 (note 360), 372, 377, 380 (note 390, with error as to site of Sangala), 405 (note 427), 417 (changes of climate), 461 (note 530), 465, 469 (results), 477, 505, 508. Major Raverty's work is such difficult reading that it is very little known. If Mr. McCrindle had studied it, he would have been saved from considerable errors, which detract from the value of his otherwise admirable work. I have generally made use of Mr. McCrindle's translations, which are good, and, as a rule, accurate.

by the Greeks, both of these Greek names seem to be but slightly modified forms of well-known tribal designations in Sanskrit. The Greek *Ὀξύδρακαι* is a good transliteration of the Sanskrit क्षुद्रका, '*Kṣudrakā*,' with an euphonic vowel prefixed.[1] The Kṣudrakas are mentioned in the Mahābhārata (2, 1871, and 6, 2106), and are probably identical with the Kṣudramīnas, a people in the northern division mentioned by Varāha Mihira (*Bṛ. Saṁh.*, xiv, 24, in *I.A.*, xxii, 182). The word Malloi is supposed to be an equivalent of the Sanskrit मालवा, 'Mālavā,' or the Prākrit form of that name. The Mālavas are frequently mentioned in the Bṛihat Saṁhitā as a northern nation, and these northern Mālavas may or may not be connected with the better known nation of that name in Central India and Rājputāna.[2]

The Greek and Roman authors to be interrogated are Arrian, Curtius, Diodorus, Justin, Pliny, and Strabo, and in order to lay a firm basis for the investigation it is desirable to quote in some detail the relevant passages from each author. I must premise that in my belief it is established that Alexander crossed the Indus at Ohind, not at Attock (Aṭak-Banāras), that his camp on the Hydaspes was at Jihlam (*vulg.* Jhelum), N. lat. 32° .25′ 56″, E. long. 73° 46′ 36″, not at Jalālpur, thirty miles lower down the river, and that his course thence to the Hyphasis (Biās) river was never very far from the foot of the hills. The site of the long-sought twelve altars should, therefore, be sought in the Gaurdāspur District, and not to the east of

[1] As Professor Otto Franke points out, the ξ of the Greek would also serve to represent *ch*, छ, the Prākrit (Pāli) equivalent of क्ष, *kṣ* ("Pāli und Sanskrit," Strassburg, 1902, p. 71).

[2] But Dr. Fleet, to whom I am indebted for the references to the Mahābhārata, writes:—"As regards Malloi = Mālavas, I do not see how by any possibility any Mālavas can be taken so far north as the Rāvi. Bühler located Northern Mālava about Fatḥpur, but I cannot give you the reference to his remarks. And I cannot see any grounds for extending Mālava beyond the Sambhar lake. I am aware that Varāha Mihira placed Mālava in the 'northern division'; but that is certainly not accurate. I should be much more inclined to take Malloi as = Malla, or Malaya. For a northern Malaya, see *Ind. Ant.*, vol. xiv, 105 foll., but also p. 320."

Amritsar, where they are placed by Mr. McCrindle. I shall not stop at present to prove these propositions, but will proceed to the discussion of the special question in hand.

The testimony of Arrian's *Anabasis*, the leading authority for Alexander's Indian campaign, is naturally the first to be considered.

Alexander crossed the Hydraotes (Rāvī) river without difficulty in August, 326 B.C.,[1] and received the submission of many of the inhabitants of the territory to the east of that river (v, 21). But a combination of independent (*αὐτόνομοι*) Indians, consisting of the Kathaioi, Oxydrakai, Malloi, and other tribes, prepared to resist him with all their forces, and to make a stand at a town called Sangala. On receiving this intelligence Alexander marched rapidly from the Hydraotes against the Kathaioi, and on the second day reached a town called Pimprama, belonging to the Adraistai, which surrendered. This town must have been about twenty to thirty English miles to the east of the river. He gave his troops a day's rest, and "on the third day" advanced to Sangala, which was stormed, the Indians suffering terrible losses, and the city was razed to the ground. Sangala, consequently, must have been about forty or fifty miles of marching distance, more or less, from the east bank of the Hydraotes river as it then flowed. No man can tell what its exact course was more than 2,000 years ago, but even Indian rivers change less in the upper than in the lower parts of their courses, and the change in the bed of the Rāvī where Alexander crossed it has probably not exceeded ten miles. The limit of variation in the lower section does not exceed twenty-five miles. We do not know the precise direction of Alexander's march from the river to Sangala, but it probably involved a considerable deviation to the south, and that town must almost certainly have been in the Gaurdāspur District, perhaps not far from Fathgaṛh (v, 22, 24). It cannot be identified; Cunningham's identification, rashly accepted by Major Raverty, being

[1] I have worked out the detailed chronology of the campaign.

demonstrably erroneous.[1] The army then advanced to the Hyphasis (Biās), and refused to proceed further.[2]

Alexander was compelled to retrace his steps, and towards the end of October, 326 B.C., began his memorable voyage down the rivers to the sea, starting from a point above the town of Jihlam, close to the site of his battle with Poros. Before quitting the banks of the Hyphasis he had constructed the famous altars to mark the extreme limit of his advance (v, 29).

The fleet sailed down the Hydaspes (Jihlam) to its junction with the Akesines (Cināb, *vulg.* Chenab) at a point which cannot be accurately determined, because, although very little change comparatively has taken place in the upper course of the Jihlam river, its place of junction with the Cināb has "changed often and considerably." The course of the Cināb also has varied enormously, and an ancient bed of the river runs far to the east of that now used by the stream. Wherever the junction of the rivers was situated—and it was somewhere not very far from Jhang in the District of that name, and perhaps to the north of it—the fleet reached it, and then sailed along the united stream, which retained the name of Hydaspes (Cināb).

Alexander "sailed rapidly to the country of the Malloi and Oxydrakai, because he had ascertained that they were the most numerous and warlike of all the Indian tribes in those parts, and news had reached him that they had conveyed their children and their wives for safety into their strongest cities, and that they meant themselves to give him a hostile reception. He in consequence prosecuted the voyage with still greater speed, so that he might attack them before they had settled their plans, and while their preparations were still incomplete and they were in a state of confusion and alarm." Thus hurrying on, the fleet in

[1] C. J. Rodgers in *Proc. A.S.B.* for 1896, p. 81.

[2] The ancient course of the Biās was appreciably further west than the modern course, but the assertions commonly made that "in Alexander's time" rivers flowed in such and such a way are absolutely baseless. Many such assertions will be found in Mr. McCrindle's book. We have no details about the Panjāb rivers until the time of the Arab conquest in 712 A.D., more than 1,000 years after "Alexander's time."

eight days reached the confluence of the Hydaspes and Akesines, where it suffered severely from the violence of the rapids and eddies. Alexander saved the survivors from the wrecks, and when he had repaired the damaged craft, and defeated a tribe called Sibi, "ordered Nearchus to sail downward till he reached the confines of the nation called the Malloi. He made himself an inroad into the territories of the barbarians who refused their submission, and prevented them sending succour to the Malloi. He then rejoined the fleet" (vi, 4).

It is clear that the 'barbarians' attacked by Alexander in person, the Sibi or Siboi of Curtius and Diodorus, were the inhabitants of the country near Jhang, probably to the north and north-east of the place,[1] for Alexander always took pains to secure his rear. It is equally clear that the western extremity of the country of the Malloi lay to the south and south-east of the confluence between the Hydaspes and Akesines, and therefore to the south of Jhang.

A rendezvous for all the forces was fixed at the next confluence, namely, that of the Akesines (including Hydaspes) with the Hydraotes (Rāvī), (vi, 5). Alexander moved southward with a picked force, and, quitting the river probably somewhere between Jhang and Shorkoṭ, led his troops "through a waterless tract of country against the Malloi, a race of independent Indians," making forced marches so as to cover a distance of about 50 miles (420 stadia) in two days and a night. The Malloi were completely surprised (vi, 6). These operations must have taken place in the south-eastern part of the Jhang District, in or about N. lat. 31°.[2]

[1] "They dressed themselves with the skins of wild beasts, and had clubs for their weapons" (Curtius, ix, 4). Another neighbouring tribe, the Agalassians, is mentioned by Diodorus. These tribes were probably the ancestors of some clans of the half-wild pastoral Jāts who now inhabit the same region.

[2] "Some seven miles east of the Chenâb the country once more abruptly rises, and changes from a wooded cultivable plain to the lifeless wilderness characteristic of the higher lands between the river valleys of the Punjab . . . . The *bár*, or wild upland plain of the Rechna Doáb, broken here and there by sandy depressions, and inhabited only by pastoral nomads, who dwell in moveable hamlets of thatched huts. Strips of cultivation along the convergent streams enclose this sterile wedge, which runs like an intrusive spur of Shâhpur District

By another forced march, "having travelled a great distance in the night," Alexander reached the river Hydraotes at daybreak, and caught up the retreating Malloi at the ford, by which he crossed, after inflicting severe loss upon the Indians. The forced night march may be interpreted as meaning a distance of 25 to 30 miles, and the total marching distance from the Akesines (including Hydaspes) to the Hydraotes at the scene of operations was about 75 miles (420 stadia, or 50 miles + 25 miles). Of course, this distance was not necessarily covered in a straight line.

After crossing the Hydraotes, Alexander stormed a city of the Brahmans, where many of the Malloi had taken refuge, and killed about 5,000 men (vi, 7). He then gave his army a day's rest, and being still to the east of the Hydraotes (Rāvī) and in the territory constituting the modern Montgomery District, continued to pursue the Malloi. They recrossed the Hydraotes, followed by Alexander, who stormed a strongly fortified town on the west side of that river, and was there dangerously wounded. The troops were enraged at the hurt done to their king, and perpetrated a massacre, in which they "spared none, neither man, woman, nor child." "The common account," observes Arrian (vi, 11), "is that this accident befell Alexander among the Oxydrakai, but in fact it occurred among the Malloi, an independent Indian nation. The city belonged to the Malloi, and the men who wounded Alexander were Malloi. They had certainly agreed to combine with the Oxydrakai and give battle to the common enemy, but Alexander had thwarted this design by his sudden and rapid march through the waterless country, whereby these tribes were prevented from giving each other mutual help."

These details prove beyond doubt that, according to Arrian, the Malloi occupied the country below the confluence

down the centre of the Jech Doáb" (*Imp. Gaz.*, 1881, *s.v.* Jhang). Much of the "lifeless wilderness" of the Panjāb is now being restored to life by systems of canals. The Jhang District lies between 30° 35′ and 32° 4′ N. lat., and 71° 39′ and 73° 38′ E. long.

of the Hydaspes and Akesines, which took place somewhere near Jhang, and that they extended from the desert east of the Akesines (including Hydaspes) to the Hydraotes, and also beyond that river to an unspecified distance eastward. In other words, the Malloi occupied at least the eastern portion of the Jhang District, and the whole or the greater part of the Montgomery District.[1]

The vigorous campaign shattered the Malloi power, and when he was still a short distance above the junction of the Hydraotes with the Akesines (including Hydaspes), "envoys came to Alexander from the Malloi who still survived tendering the submission of the nation; and from the Oxydrakai came the leading men of their cities and their provincial governors, besides 150 of their most eminent men, entrusted with full powers to conclude a treaty" (vi, 14). The submission of both the powers was graciously accepted, and Alexander, using country boats locally procured and built, "sailed a short distance down the Hydraotes," and reached the confluence of that river with the Akesines (including Hydaspes), and there met the rest of his fleet and army. He then passed on to the confluence of the Hyphasis (Biās) with the Akesines (including Hydaspes and Hydraotes), and so on to the final confluence of the united waters with the Indus.[2]

We see, therefore, that the campaign against the Malloi was essentially the campaign of the Hydraotes river, as that against Poros was the campaign of the Hydaspes. The

[1] The interior upland of the Montgomery District is, or was twenty years ago, "a desert plateau, partially overgrown with brushwood and coarse grass, which are interrupted at places by an impenetrable jungle, impassable alike for man or horse. From time immemorial the Rechna Doáb has formed the home of a wild race of pastoral Játs . . . . The pastoral clans of Játs call themselves the 'Great Rávi' tribes, in contradistinction from the purely agricultural classes, who are contemptuously named the 'Little Rávi.'" Numerous traces of ancient towns and villages exist even in the desert tracts (*Imp. Gaz.*, 1881, *s.v.* Montgomery). The Játs of the Montgomery District may well be descendants of "the Malloi who survived" Alexander's ruthless handling. This district, which was formerly known as Ghughērah (Gugaira), lies partly in the Bāri and partly in the Racna Doāb. The village, which does duty as its capital, stands in a waterless and treeless plain, in N. lat. 30° 58′, E. long. 73° 21′.

[2] That is to say, the great river called by the Greeks the Indus, but which seems to have been really the Hakṛā or Wahindah, which has disappeared.

accounts of the different historians seem to imply that when Alexander reached the confluence of the Hydraotes (Rāvī) with the Akesines (Cināb, including Hydaspes) he had done with the Malloi, whose southern frontier seems to have been marked by that confluence, which was, as far as can be judged, to the south of Shorkoṭ, and about 40 miles north-east of Multān. The Oxydrakai were near enough to the Malloi to become their allies, and to have joined them, if they had not been forestalled by Alexander's unexpected rapidity of movement, but were distant enough to be too late.

The facts that the Malloi occupied both banks of the Hydraotes, and were finally defeated near that river, prove that errors have crept into Arrian's description of the position of the Oxydrakai and Malloi, which is inserted in the account of the Indian rivers given by him in *Indika*, ch. iv. His words are:—"*Τῷ δὲ Ἰνδῷ ἐς ταὐτόν ἔρχεται. Ὑδραώτης μὲν ἐν Καμβισθόλοις, παρειληφὼς τόν τε Ὕφασιν ἐν Ἀστράβαις καὶ τὸν Σαράγγην ἐκ Κηκέων καὶ τὸν Νεῦδρον ἐξ Ἀττακηνῶν, ἐς Ἀκεσίνην ἐμβάλλουσιν. Ὑδάσπης δὲ ἐν Ὀξυδράκαις, ἄγων ἅμα οἱ τὸν Σίναρον ἐν Ἀρίσπαις, ἐς τὸν Ἀκεσίνην ἐκδιδοῖ καὶ οὗτος. Ὁ δὲ Ἀκεσίνης ἐν Μαλλοῖς συμβάλλει τῷ Ἰνδῷ· καὶ Τούταπος δὲ μέγας ποταμὸς ἐς τὸν Ἀκεσίνην ἐκδιδοῖ. Τούτων ὁ Ἀκεσίνης ἐμπλησθεὶς καὶ τῇ ἐπικλήσει ἐκνικήσας αὐτὸς τῷ ἑωϋτοῦ ἤδη ὀνόματι ἐσβάλλει ἐς τὸν Ἰνδόν.*"[1]

The statements made in this passage are so obviously erroneous, being opposed to the facts of the map and the testimony of the *Anabasis*, that the text must be regarded as seriously corrupted.

[1] Text, as in Schwanbeck, *Megasthenis Indica*, p. 108. Ἀστράβαις seems to be a misprint, as the note gives Ἀστρόβαις; *v.l.* (from the best MS., according to Gronovius) is Ἀστρύβαις. For Κηκέων the same MS. gives Κηνέων; *v.l.* Μηκέων. All MSS. read ἐμβάλλουσιν, but some editors correct to ἐμβάλλει. Mr. McCrindle, when rendering the words Ὑδάσπης δὲ ἐν Ὀξυδράκαις, ἄγων ἅμα οἱ τὸν Σίναρον ἐν Ἀρίσπαις, ἐς τὸν Ἀκεσίνην ἐκδιδοῖ καὶ οὗτος, translates: "The Hydaspes again, rising in the dominions of the Oxydrakai, and bringing with it the Sinaros, received in the dominions of the Arispai, falls itself into the Akesinês"; but there is no warrant for the insertion of the word "rising." The words ἐν Ἀρίσπαις may be connected, as in Mr. McCrindle's version, with the preceding clause, or with the following one, as in Gronovius' edition (Leyden, 1704). Gronovius renders the whole sentence thus: "Hydaspes vero in Oxydracis Sinarum in se recipiens, in Arispis etiam in Acesinem fertur." This version is, I think, preferable.

The assertion made in the second clause that the Hydraotes, after picking up (*παρειληφώς*) the Hyphasis and two other tributaries, fell into the Akesines, is clearly wrong. The Hyphasis (Biās) was never, so far as is known, a tributary of the Hydraotes (Rāvī). The corruption of the text is further indicated by the erroneous plural *ἐμβάλλουσιν* in the same clause, which is found in all MSS.

The next clause, that which immediately concerns the present enquiry, is equally corrupt, for it is certain that the Hydaspes (Bihat or Jihlam) was never within a hundred miles of the Oxydrakai, who were not concerned with Alexander until he had crossed the Hydraotes (Rāvī).[1] The Oxydrakai undoubtedly occupied the banks of the Biās (Hyphasis). If it be thought worth while to attempt a partial emendation of a thoroughly corrupt passage, sense may be made of this clause by substituting the name Hyphasis for Hydaspes, and the translation will be: "The Hyphasis in the Oxydrakai country, bringing with it the Sinaros, in the Arispai country falls into the Akesines likewise."

This emendation, so far as it goes, is probably sound. But, when the whole passage bristles with corruptions, patching up one clause is not much good. The next following clause states that the Akesines falls into the Indus in the Malloi territory, which it certainly never did. The Malloi, as we have seen, extended only to the junction of the Hydraotes (Rāvī) with the Akesines. The confluence of the latter river with the Indus lay far to the south. The "great river named Toutapos," next mentioned, is not known, and it is not easy to see where another great river could come in. The result is that the passage, as a whole, must be regarded as hopelessly corrupt and devoid of authority. It could not possibly have proceeded as it stands from the pen of Arrian, who knew what he was writing about; for he enumerates the confluences correctly in the *Anabasis* (vi, 14) as (i) Hydaspes with Akesines; (ii) Hydraotes

[1] The Oxydrakai do not seem to have ever actually come into conflict with Alexander, being saved by their delay in joining their allies.

with Akesines (including Hydaspes); (iii) Hyphasis with Akesines (including Hydaspes and Hydraotes); (iv) Akesines (including Hydaspes, Hydraotes, and Hyphasis) with the Indus. Apparently, as Major Raverty points out, the river, which the Greeks call the Indus below the confluence with the Akesines, was really, for most of its course, the lost river of Sind, the Hakṛā or Wahindah, which finally disappeared in the eighteenth century, but is still distinctly traceable and is partly marked on the better maps.[1]

The historians Curtius, Diodorus, and Justin, who are authorities of importance much inferior to that of Arrian, may be disposed of briefly. Curtius (ix, 4) relates that Alexander erected a second set of altars at the confluence of the Hydaspes with the Akesines, and thence came into the dominions of the Sudracæ and Malli, "who hitherto had usually been at war with each other, but now drew together in presence of the common danger." The historian then proceeds to make the blunder, which Arrian refutes, of placing the city where Alexander was wounded in the territory of the Sudracæ, or Oxydrakai. It is obvious that the Sudracæ of Curtius are the Oxydrakai of Arrian. In Book ix, ch. 7, Curtius describes with interesting additional details the embassies sent by the Malloi and Oxydrakai.

Diodorus (Book xvii, 98) disguises the Oxydrakai under the name of the Syrakousai, and agrees with Curtius in stating that they and the Malloi "had been at feud with each other, but on his approach had settled their differences," and adds that they "cemented an alliance by intermarriage, each nation taking and giving in exchange 10,000 of their young women for wives." The tribal army was estimated as numbering 80,000 foot, 10,000 horse, and 700 chariots, but owing to disputes about the leadership, and to the extraordinary rapidity of Alexander's movement, the junction

[1] The Akesines (carrying with it the Hydaspes, Hydraotes, and Hyphasis) probably fell into the Indus, and the Indus joined the Hakṛā, but the Greeks do not recognize the Hakṛā as a separate river, and call the stream all through down to the sea by the name of Indus. It is very unlikely that the Hakṛā did not exist in Alexander's time.

with the Oxydrakai was never effected, and the Malloi alone were exposed to the fury of the Macedonian attack.

There is nothing in either Curtius or Diodorus inconsistent with Arrian's statements in the *Anabasis* as to the relative positions of the Malloi and Oxydrakai.

Justin (xii, 8) briefly relates the story of Alexander's dangerous wounding, but strangely disguises the names of the confederate tribes under the forms Ambri and Sigambri, which are probably due merely to corruptions of the text. He gives no information which helps to define the geographical position of the tribal territories.

The testimony of Pliny and Strabo is of greater value, each of these authors stating with precision certain facts which are of importance for solving the question under consideration. Pliny's reference is purely incidental, and occurs in his chapter (*Nat. Hist.*, xii, 6) which is headed in the old Basle edition *De arbore pala, et arboribus Indicis sine nominibus et laniferis*:—"Major alia pomo et suavitate præcellentior, quo sapientes Indorum vivunt. Folium alas avium imitatur, longitudine trium cubitorum, latitudine duûm. Fructum cortice emittit, admirabilem succi dulcedine, ut uno quaternos satiet. Arbori nomen *palæ*, pomo *arienæ*. Plurima est in Sydracis, expeditionum Alexandro termino."

The Sydraci of this passage are clearly the Sudracæ of Curtius, the Oxydrakai of Arrian, but the learned encyclopædist teaches us two new facts about them, namely, that the curious jack-fruit was especially abundant in their country,[1] and that the expedition of Alexander reached its limit in the same. Inasmuch as it is certain that the Macedonian invasion was arrested on the bank of the Hyphasis (Biās) river, we learn from Pliny that the Oxydrakai territory

[1] The fruit described is unmistakably the 'jack' (*Artocarpus integrifolius*); but by a curious blunder the information supplied to Pliny has fitted the leaves of the banana, or plantain as Anglo-Indians call it (*Musa*, sp.), to the fruit of the jack-tree. The description of the leaves applies to *Musa* as unmistakably as the description of the fruit applies to *Artocarpus integrifolius*. Bookish commentators have failed to recognize these obvious facts. The names seem to have been derived from merchants trading with South India. *Pala* = Tamil *palā* = 'jack.' *Ariena* may possibly be a corrupt transcription of *ariti*, the Telugu word for 'banana.'

extended to that river, and to the upper part of its course. The altars of cut stone which Alexander erected at the furthest point of his eastward march could not have been built except in a place where stone was abundant, and such a place must have been near the hills and high up the river.

Strabo (xv, 8) contributes another detail, which proves the northern extension of the Oxydrakai, by observing that "the Oxydrakai are, they say, the descendants of Dionysos, because the vine grows in their country, and because they display great pomp in their processions." Everyone who has been in India knows that the vine does not grow, except perhaps as a carefully nursed garden plant, in the scorched plains of the Panjāb, while it can be grown on a large scale in the lower hills.[1]

In another passage (xv, 33) Strabo again alludes to the Oxydrakai:—

"Nearly all the nations of importance by which the country between the Indus and the Hydaspes is inhabited have been already mentioned. Lower down, the people called the Sibai come next, but of these we have spoken already. Then succeed the Malloi and Oxydrakai, great nations. Among the Malloi Alexander was in danger of losing his life from a wound he received in the capture of a small town. The Oxydrakai, as we have stated, were fabled to be akin to Dionysos."

The allusion to the "small town" is of interest as forming part of the proof that the place where Alexander received his dangerous wound was not Multān, as is confidently asserted in most books. The "small town" was 80 or 90 miles north-east of Multān, and cannot be identified.

Major Raverty's views concerning the position of the territory of the Malloi and Oxydrakai, although, in my judgment, perfectly sound, have met with unmerited neglect,

[1] In Book xv, ch. 6, Strabo mentions a people called Hydrakai, whom the Persians summoned to attend them as mercenaries. Mr. McCrindle (*Ancient India as described in Classical Literature*, p. 12) is clearly mistaken in identifying these people with the Oxydrakai mentioned by Strabo on the next page. Strabo would not have called the same people by two different names in passages separated only by a few lines, nor could the Persian kings have sought for mercenary troops on the banks of the Rāvī and Biās. The Hydrakai must have lived near the Indus.

owing to the fact that they are buried in the midst of a mass of discursive footnotes. My readers may be glad to see some of his most pertinent observations disinterred from the superincumbent weight of learning.

"Alexander's march, according to the map given by Cunningham in his 'Ancient Geography of India,' p. 248, is represented as leading straight down from 'Uch,' which he calls 'Alexandria,' . . . to 'Ubaro' along the Indus . . . and then . . . to 'Kurachí.' In another direction Alexander is taken from 'Kotri' to 'Lomibari ost,' just according to the present course of the river, as though it had never changed from his time to this day. Of course, all this is pure imagination, while we know what mighty changes have taken place, even since the 'Arab conquest of Sind, and that the river has been constantly changing. . . . I know quite well that none of the places mentioned were then in existence, and that the Indus did not run then as supposed." (p. 313, n. 312.)

"The direction taken by Alexander against the Malli, and the situation of their territory, as described by the historians of his campaigns, depends entirely upon where the Hydraotes [Ráwí] united with the Akesines [*Chin-áb*] at that period. . . . The Malli are said to have occupied the country between the lower part of the courses of the Hydraotes and Acesines, and also the district beyond the Hydraotes. What plainer description can be desired to show that the lower part of what in comparatively modern days was called the Rachin-áb Do-ábah, in part of the Sándal *Bár*, the Gondal *Bár*, and part of the Ganjí *Bár* adjoining it and the Bárí Do-ábah is meant, even according to the most ancient courses of the rivers that we know of. . . . The *junction of the Acesines* [Chin-áb] *with the Hydraotes* [Ráwí] . . . in the time of the 'Arabs . . . took place about twenty miles *north-east of Multán*, but in Alexander's day it probably took place, to judge from the most ancient channels, much higher up, and between Siḍhú kí Sará'e and Shor Koṭ, but nearer to the latter place." (p. 362, n. 360.)

"Alexander himself, however, ... advanced laterally from the left [east] bank of the Acesines [Chin-áb], that is, into the Rachin-áb Do-ábah, and encamped near a small stream which skirted the western edge of the desert [*bár*?] that intervened between the upper settlements of the Malli upon the Hydraotes [Ráwí], and came to a halt for a short time. This stream, no doubt, refers to one of those *nahrs*, or old canals, as they are supposed to be, still to be traced in the present Jhang district.

After marching the remainder of that day and all night, at dawn he arrived before the Malli stronghold, the march across the desert [*bár*] having *exceeded twenty-five* miles. He was still in the Rachin-áb Do-ábah, but it is not said in what direction his march lay, but it may have been in a south-easterly direction, or even more towards the east, from the context, and the time it subsequently took to convey him to the confluence of the two rivers, after he was wounded, and that depends on where that confluence was. The distance mentioned, if he marched south-east from the ancient bed of the Chin-áb, would have brought him to the northwards of where Koṭ Kamáliah now stands, if not to within four or five miles west of Samandar, on the road from Mughiánah to Ghugherah. Wherever it was, the people were taken by surprise, and their city and fortress stormed." (p. 364.)

"The place where Alexander was so badly wounded in storming it. Where this fortress might have been I cannot say, but it was in the Rachin-áb Do-ábah, not far from the then banks of the Hydraotes [Ráwí], and somewhere to the northward of Koṭ Kamáliah, or between that place and Samandar, or even further north near the old channel of the river shown in the general map, No. 1. . . . The place could not be Multán . . . which was too far south. . . . The descriptions given by the Greek writers clearly show that all these operations took place in the Rachin-áb Do-ábah, between the Chin-áb and the Ráwí, in whatever direction they may have flowed at that period, and chiefly on the banks of the latter, eighty miles north-east of Multán, and nearly double that distance north-north-east of U'chchh." (p. 364.)

"Hence the absurdity of attempting to 'fix' upon modern places as ancient sites, and 'identifying' them with places mentioned by the Greeks." (p. 377.)

"Alexander, having left the confluence of the three united rivers, Hyphasis, Acesines, and Hydraotes, with the Indus . . . according to the Greek writers, but according to the courses of the rivers in ancient times, down the Hakṛá or Wahindah, after the junction of the Panch Nad or Panj Áb rivers, including the Áb-i-Sind or Indus, with it at Dosh-i-Áb. . . ." (p. 461.)

The above extracts will suffice to indicate the position taken up by Major Raverty with regard to the 'identifications' so confidently and freely published by Cunningham, McCrindle, and other writers, and blindly accepted by most people on their authority.

But the nature and extent of the changes in the Panjāb rivers cannot be thoroughly understood without careful study of maps on an adequate scale, and of Major Raverty's discursive comments at their full length—a task which very few readers would care to undertake. The materials collected in this paper should, however, be sufficient to prove that, although identification of particular spots in the territory of the Malloi and Oxydrakai is absolutely impossible, there is no doubt whatever about the position of that territory as a whole.

The confluence of the Hydaspes (Bihat or Jihlam) river with the Akesines (Cināb) took place at a point much higher up than the present confluence. Its exact position is not known, but it was probably thirty to forty miles north of Jhang, which is situated in N. lat. 31° 16′ 16″, E. long. 72° 21′ 45″.

The old confluence of the Hydraotes (Rāvī) with the Akesines (including the Hydaspes) was not very far removed from the present confluence, but was probably about fifteen miles higher up, and some forty miles to the south of Jhang. These two confluences mark the western boundary of the Mallian power, which may be defined *approximately* as running along E. long. 72° 25′ between N. lat. 31° 50′ and 30° 40′.

Eastward the Malloi extended beyond the Hydraotes (Rāvī) to an amount not capable of exact definition. Their territory, therefore, included the greater part of the Jhang District and the north-western portion of the Montgomery District. The old course of the Hyphasis (Biās or Biāh), which passed Debālpur (*vulg.* Dīpalpur)[1] and Kasūr was, perhaps, the south-eastern boundary of the Malloi. We cannot be far wrong if we indicate the Mallian territory as extending along both banks of the Hydraotes (Rāvī), from Shorkot on the south-west to Lahore on the north-east. The Kathaioi occupied the left, or eastern, bank of the Hydraotes above Lahore, and the Oxydrakai lay to the east

[1] Raverty (p. 375, note 380) gives a full account of Debālpur.

of the Kathaioi, along the banks of the Hyphasis (Biās), in the country now known as the Amritsar, Gaurdāspur, Kāngra, and Hoshiārpur Districts. The vines characteristic of the Oxydrakan territory must have been grown in the lower hills about Pathānkoṭ, and the altars of Alexander should be looked for along the most ancient bed of the Biās, whichever that may be, not many miles from Gaurdāspur. I think it is quite possible that traces of those massive structures may still exist.[1] They have never been looked for in the right place.

If the corrupt and unintelligible passage of the *Indika* of Arrian be put aside, all the evidence is in favour of the position assigned by me to the Malloi, Oxydrakai, and Kathaioi, which makes the history of the operations against the allied tribes for the first time intelligible; and I venture to think that any future map of Alexander's Indian campaign may safely be constructed in accordance with the sketch-map which accompanies this paper.

The maps published by Cunningham and McCrindle certainly contain very serious errors.[2] Both these authors agree in placing the Malloi around Multān, which is much too far south and remote from the allied Kathaioi. There is no reason whatever, except a transparently false etymology, for connecting the Malloi (probably = *Mālavā* or *Malaya*) with Multān (*Mūlasthānapura*). Mr. McCrindle brings the Oxydrakai down to the south of the Malloi, below parallel 30°, an absolutely impossible position. Cunningham, again misled by fanciful etymologies, places the Oxydrakai in the Jhang District, the true country of the Malloi. Neither author distinctly marks the country of the Kathaioi, but Cunningham 'identified' their chief city, Sangala, with

[1] They were "to equal in height the highest military towers, and to exceed them in point of breadth" (Arrian, *Anab.*, v, 29); built "of squared stone" (*Curtius*, ix, 3); "50 cubits in height" (Diodorus, xvii, 95); subsequently worshipped "in the Hellenic fashion by the kings of the Praisiai" (Plutarch, *Alex.*, ch. lxii); erected in "a camp of unusual size and splendour" (Justin, xii, 9). Pliny places the altars on the left or eastern bank of the Hyphasis.

[2] *Cunningham*, "Ancient Geography of India," facing p. 104; *McCrindle*, "The Invasion of India by Alexander the Great," facing p. 57. Major Raverty erroneously accepts Cunningham's site for Sangala.

the mound of that name in the Gujrānwāla District, about fifty-five miles W.N.W. from Lahore. This 'identification,' as already observed, has been *proved* to be impossible, and is given up by Mr. McCrindle, who is generally inclined to follow Cunningham. In the location of the kingdom of Sophytes (Sopeithes) Mr. McCrindle again ventures to desert Cunningham's guidance, and places the kingdom due north of Amritsar. Notwithstanding the fact that there is some discrepancy between ancient authors on the subject, Major Raverty and Cunningham are unquestionably right in locating Sophytes in the Salt Range to the west of Jihlam. Strabo's statement (xv, 31) that "it is said that in the country of Sôpeithês there is a mountain of fossil salt which could supply all India" is conclusive. The altars of Alexander are placed by Mr. McCrindle nearly thirty miles to the east of Amritsar, a position considerably too far south. Cunningham goes still farther wrong, and locates them forty miles to the south of that city.

It is thus apparent that the maps prepared by two eminent authorities are not only discrepant one with the other, but are both out of accord with the original authorities. Although the investigation in this paper has been confined as far as possible to the establishment of the true position of the autonomous tribes or nations in the Eastern Panjāb, the same principles may be applied to the whole story of Alexander's movements in the Panjāb and Sind. If they are so applied, *all* the current 'identifications' to be found in many well-known books will disappear, with one exception.

That exception is Taxila, of which the site is marked by so many indications that it could not possibly be mistaken by anybody who took the trouble to look for it. But from the time that Alexander left Taxila in March or April, 326 B.C., until he reached Pura, or Bampur, the capital of Gadrosia (Mukrān), in January, 324, not a single spot can be named as having *certainly* been visited by him. We can make out the position of the countries of the Malloi and other tribes to a certain extent, but we can neither define

the boundaries of those countries nor identify a single town in them. The whole face of the Panjāb and Sind has been changed, and it is hardly an exaggeration to say that the countries passed through by Alexander no longer exist. Every one of the rivers has repeatedly changed its course and ranged over a very wide area, and one great river, the greatest of all, the Hakṛā or Wahindah, has ceased to exist. The coastline has advanced considerably more than fifty miles, levels have been altered by stupendous earthquakes and floods, and the climate has been profoundly modified. In these circumstances detailed 'identification' of specific localities is, as Major Raverty truly observes, "a farce."[1]

[1] The advance of the coastline, which has greatly increased the length of the rivers, must necessarily have reduced their gradients and the force of their currents. The Cināb and Jihlam now unite quietly, without the turmoil which marked the confluence of the Akesines and Hydaspes in Alexander's time, and was still marked at the time of Tīmūr's invasion at the close of the fourteenth century. Rain used to fall copiously in regions now practically rainless.

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ART. XXIV.—*Notes from the Tanjur.* By F. W. THOMAS, M.R.A.S.

3.

PROFESSOR L. DE LA VALLÉE POUSSIN notes the following points in the text of the *Īśvarakartṛtvanirākaraṇa* printed above, pp. 345–9 :—

p. 346, l. 7, the Tibetan favours the reading **विरोधादेव** rather than **विरोध एव** ;

l. 19, probably the former of the two **इति**'s should be omitted ;

l. 20, should we insert **यथा** after **इति**? cf. the Tibetan ;

l. 21, should we read **परत** for **पर**[1]?

p. 347, l. 1, for **प्यत्रन** read **प्यन**.

4. The *Suprabhātastotra* of *Śrī-Harṣadeva.*

This poem is contained along with certain other stotras in one of the Nepalese MSS. presented by the late B. H. Hodgson to the Library of the India Office (I.O., 2921). A second copy is included in the collection of the Bengal Asiatic Society, and its initial verses are quoted by Rājendra Lāla Mitra in his account of the MS. A third copy is among the works presented to Burnouf, and now in the Bibliothèque Nationale in Paris.

[1] For the same suggestion I am indebted also to Dr. Stcherbatskoi, who would, however, in ll. [redacted] **इति नैवं दृष्टमिष्टं वा**.

With the help of the last of these and three further MSS. accessible to him, one accompanied by a Newari translation, Minayeff has published a text and Russian rendering, which may be seen in the *Journal of the Russian Archæological Society*, N.S., ii, pp. 233–7. This text, with some changes, I now reprint in order to confront it with a Tibetan version, which is to be found in the first volume of the Tanjur (*Bstod*, foll. 262–4). Here, as in Minayeff's MSS., the poem is ascribed to King Śrī-Harṣadeva of Kashmir. A slight confirmation of this ascription, which would be, indeed, in itself of some authority, is to be found in the occurrence of the word *harṣa* in the last verse of the poem, seeing that Hindu writers often in this way attach the seal of authenticity to their works. In the *Naiṣadhakāvya* itself the same poet has at the end of every canto taken care to assert his authorship. Accordingly, we are justified in accepting the statement of the Tibetan text.

Beside the renown of its author, the *Suprabhātastotra* has another interest. Professor Leumann, to whom I applied for some information regarding the Jaina *Suprabhātastava* mentioned in his list of Strassburg Digambara MSS. (*Vienna Oriental Journal*, xi, p. 311), has pointed out to me that the *Suprabhāta* literature must have been a regular type hitherto not sufficiently recognized. He has kindly forwarded to me the *pratīkas* of one Digambara hymn of this kind and the full text of a second. The former has been already printed in India, as I learn from Dr. L. D. Barnett, of the British Museum, who has kindly made a copy of it for me. Neither bears in general (but see note to vv. 19–20) any close relation to the poem of Harṣadeva. A Brahmanical *Suprabhāta*, as we learn from the reference in the St. Petersburg Dictionary, s.v. Suprabhāta, is contained in the *Vāmana-Purāṇa*, and this is identical with the work cited in Aufrecht's *Catalogus Catalogorum* from Dr. Stein's Catalogue of MSS. in the Jammu Library.

I need not dwell further on the general type of this literature, since Professor Leumann has undertaken to deal with it and with the Jaina specimens. A Buddhist stotra

is, as the reader will see, a morning hymn addressed to Buddha, whose faith remains in everlasting dawn, while the remaining divinities and sages, including the sun himself, sink in sloth and sleep.

The India Office MS. presents a text of the hymn, in which each verse is followed by a Nepalese interpretation. The text is in so depraved a condition (see the notes) that it would be impossible to edit the poem without the help of the Tibetan version or other MSS. Rājendra Lāla Mitra's citations seem to show that the Calcutta MS. is nearly as corrupt, but they supply one or two good readings. It may be not out of place to express a suspicion that some of the other works from Nepal which show the worst kind of corruptions may nevertheless be of good age, and may once have existed in a less fallen condition.

It will be seen that the Sanskrit and Tibetan versions here presented differ in the order of some of the verses (see the bracketed numbers attached to the latter). In all the Sanskrit MSS. we find the same order (except that the I.O. copy places v. 22 after v. 18), which is preferable on other grounds. The Tibetan translators used an inferior MS., and their version has been inaccurately preserved, so that some of the lines are defective or hypermetrical.

The metre, Mālinī, was probably chosen as being common to many Prabhāta verses (see the Subhāṣitāvalī under this head).

ओं नमो बुद्धाय

स्तुतमपि सुरसंघैः सिद्धगन्धर्व्वयक्षै
र्दिवि भुवि सुविचित्रैः स्तोत्रवाग्भिर्य्यतीशैः।
अहमपि कृतशक्तिर्नौमि संबुद्धमार्य्यं
नभसि गरुडयाते किं न यान्ति द्विरेफाः ॥ १ ॥

क्षपितदुरितपक्षः क्षीणनिःशेषदोषो
द्रवितकनकवर्णः फुल्लपद्मायताक्षः।
सुरुचिरपरिवेषः सुप्रभामण्डलश्री
र्दशबल तव नित्यं सुप्रभातं प्रभातं ॥ २ ॥

मदनबलविजेतुः कापथोच्छेदकर्त्तुः
त्रिभुवनहितकर्त्तुः स्त्रीलताजालहर्त्तुः।
शमसुखफलदातुर्भक्तुरज्ञानशैलं
दशबल तव नित्यं सुप्रभातं प्रभातं ॥ ३ ॥

असुरसुरनराणां योऽग्रजन्माग्रदेवः
सकलभुवनधातौ लोकसृष्ट्येकशब्दः।
स्वपिति मनुजधाता पद्मयोनिः स्वयंभू
र्दशबल तव नित्यं सुप्रभातं प्रभातं ॥ ४ ॥

| Rgya . gar . skad . du | su . pra . bhā . ta . pra . bhā . ta . sto . tra | bod . skad . du | rab . tu . sña . bar . nam . laṅs . pa*ḥi* . bstod . pa |

| hjig . rten . gsum . gyi . mña*ḥ* . bdag . la . phyag . *ḥ*tshalo |

1. | Lha . yi . tshogs . daṅ . grub . pa . dri . za*ḥi* . gtso . daṅ . sdom . brtson . dbaṅ . rnams . kyis |
| bstod . tshig . sna . tshogs . dag . gis . lha . yul . sa . steṅ . namsu-. bstod . mod . kyi |
| bdag . kyaṅ . ji . ltar . nub[1] . pas . *ḥ*phags . pa . rdzogs . pa*ḥi* . saṅs . rgyas . bstod . bgyi . ste |
| namkha*ḥ* . la . ni . mkha*ḥ* . ldiṅ . *ḥ*phur . żes . buṅ . ba . rnams . ni . cis . mi . *ḥ*phur |

2. | mi . mthun . phyogs . spaṅs . gyur . ba . lus . pa . med . pa*ḥi* . skyon . ni . zad . gyur . la |
| btso . ma . gser . gyi . mdog . can . padma . rgyas . pa . lta . bur . yaṅs . pa*ḥi* . spyan |
| dpal . ldan . mdzes . pa*ḥi* . *ḥ*od . kyi . dkyil . *ḥ*khor . lha . yi . tshogs . kyis . yoṅs . bskor . ba*ḥi* |
| stobs . bcu . mña*ḥ* . ba . khyod . ni . rtag . tu . rab . tu . sña . bar . nam . laṅs . pa*ḥo* |

3. | bdud . kyi . dpuṅ . las . rnam . par . rgyal . ba . ñam . ṅa . lam . na . gcod . mdzad . pa |
| sa . gsum . phan . par . mdzad . pa . *ḥ*khri . śiṅ . dra . ba . gsum . la . dral . mdzad . pa |
| żi . ba*ḥi* . bde . ba . rtsol . bar . mdzad . pa . mi . śes . ri . bo . *ḥ*jig . mdzad . pa |
| stobs . bcu . mña*ḥ* . ba . khyod . ni . rtag . tu . rab . tu . sña . bar . nam . laṅs . pa*ḥo* |

4. | gaṅ . żig . lha . min . mi . daṅ . lha . rnams . kyi . yaṅ . sṅon . du . bde . ba*ḥi* . gnas . thob . pa |
| ma . lus . pa*ḥi* . sa*ḥi* . khamsu . *ḥ*jig . rten . gcig . bsdus . dbyaṅs . gsaṅ . mthon . po . sgrogs |
| śed . las . skyed[2] . pa . bsgo . byed . raṅ . byuṅ . padma*ḥi* . skye . gnas . can[3] . gñid . log . gyur |
| stobs . bcu . mña*ḥ* . ba . khyod . ni . rtag . tu . rab . tu . sña . bar . nam . laṅs . pa*ḥo* |

[1] *Sic* for *nus*. [2] *Sic* for *skyes*? [3] *cani*, text.

उदयगिरितटस्थो विद्रुमच्छेदताम्र

स्तिमिरकुलनिहन्ता चक्षुरेकं प्रजानां।

रविरपि मदलोलः सर्व्वथा सोऽपि सुप्तो

दशबल तव नित्यं सुप्रभातं प्रभातं ॥ ५ ॥

द्विरददशनपाण्डुः शीतरश्मिः शशांक

स्तिलक इव रजन्याः शर्व्वचूडामणिर्य्यः।

अविगतमदरागः सर्व्वथा सोऽपि सुप्तो

दशबल तव नित्यं सुप्रभातं प्रभातं ॥ ६ ॥

प्रवरभुजचतुष्कः षोडशार्धार्धवक्त्रो

जपनियमविधिज्ञः सामवेदप्रवक्ता।

अमलकमलयोनिः सोऽपि ब्रह्मा प्रसुप्तो

दशबल तव नित्यं सुप्रभातं प्रभातं ॥ ७ ॥

कुवलयदलनीलः पुण्डरीकायताक्षः

सुररिपुवरहन्ता विश्वकृद्विश्वरूपी।

हरिरपि चिरसुप्तो गर्भवासैरमुक्तो

दशबल तव नित्यं सुप्रभातं प्रभातं ॥ ८ ॥

5. | śar . gyi . ri*h*i . rtse*h*i . ṅos . la . gnas . śiṅ . dmar . po*h*i . *h*od . kyis . gnaṅ . non . pa |
| mun . pa*h*i . tshogs . rnams . *h*joms . par . byed . par[1] . skye . dgu . rnams . kyi . mig . gcig . du |
| ñi . ma . de . yaṅ . myos . pas . *h*phyin[2] . ciṅ . rnam . pa . kun . tu . gñid . log . gyur |
| stobs . bcu . mṅa*h* . ba . khyod . ni . rtag . tu . rab . tu . sṅa . bar . nam . laṅs . pa*h*o |

6. | glaṅ . bo . che . ltar . dkar . bsil . bsil . ba*h*i . zer . can . ri . boṅ . mtshan |
| mtshan . mo*h*i . thig . le . lta . bur . mdzes . pa . kun . gyi . gtsug . gi . nor . bu . gaṅ |
| dman . pa*h*i . mdaṅs . daṅ . bral . ba . des . ni . rnam . pa . kun . tu . gñid . log . gyur |
| stobs . bcu . mṅa*h* . ba . khyod . ni . rtag . tu . rab . tu . sṅa . bar . nam . laṅs . pa*h*o |

7. | rab . mchog . lag . pa . bżi . ba . bcu . drug . phyed . phyed . phyogs . kyi . gdoṅ . pa . can |
| bzlas . daṅ . ñes[3] . pa*h*i . cho . ga . śes . śiṅ . ṅes . brjod . rig . byed . *h*don . pa . po |
| dri . med . padma*h*i . skye . gnas . tshaṅs . pa . de . yaṅ . rab . tu . gñid . log . gyur |
| stobs . bcu . mṅa*h* . ba . khyod . ni . rtag . tu . rab . tu . sṅa . bar . nam . laṅs . pa*h*o |

8 (10). | utpal . sṅon . po*h*i . *h*dab . ma . ltar . sṅo . padma . ltar . dkar . yaṅs . pa*h*i . mig |
| lha . min . gtso . bo . thams . cad . bcom . gyur . thams . cad . byed . pa . sna . tshogs . gzugs |
| khyab . *h*jug . kyaṅ . ni . yun . riṅ . gñid . log . mṅal . gyi . gnas . las . thar . ma . gyur |
| stobs . bcu . mṅa*h* . ba . khyod . ni . rtag . tu . rab . tu . sṅa . bar . nam . laṅs . pa*h*o |

[1] *Sic* for *pa*?
[2] *Sic* for h*phyan*.
[3] żes (?).

हिमगिरिशिखरस्थः सर्व्वयज्ञोपवीत

स्त्रिपुरदहनदक्षो व्याघ्रचर्म्मोत्तरीयः।

सह गिरिवरपुत्र्या सोऽपि सुप्तस्त्रिशूली

दशबल तव नित्यं सुप्रभातं प्रभातं ॥ ९ ॥

ज्वलितकुलिशपाणिर्दुर्ज्जयो दानवानां

सुरपतिरपि शच्या विभ्रमे मूढचेताः।

अनिशि निशि च सुप्तः कामपंके निमग्नो

दशबल तव नित्यं सुप्रभातं प्रभातं ॥ १० ॥

हिमशशिकुमुदाभो मद्यपानारुणाक्षो

दृढकठिनभुजांगो लांगली शक्तिहस्तः।

बल इह शयितो ऽसौ रेवतीकण्ठलग्नो

दशबल तव नित्यं सुप्रभातं प्रभातं ॥ ११ ॥

गजमुखदशनैकः सर्व्वतो विघ्नहन्ता

विगलितमदधारः षट्पदाकीर्णगण्डः।

गणपतिरपि सुप्तो वारुणीपानमत्तो

दशबल तव नित्यं सुप्रभातं प्रभातं ॥ १२ ॥

9 (8). | gaṅs . kyi . ri . bo*h*i . rtse . la . gnas . śiṅ . sbrul . kyis . mchod . phyir . thogs . pa . *h*chaṅ |
| groṅ . khyer . sum . brtsegs . sreg . par . nus . gaṅ . stag . gi . pags . pa*h*i . gos . gyon . pa |
| rtse . gsum . can . dreg . ri . mchog . bu . mo . daṅ . ni . lhan . cig . gñid . log . gyur |
| stobs . bcu . mṅa*h* . ba . khyod . ni . rtag . tu . rab . tu . sṅa . bar . nam . laṅs . pa*h*o |

10 (9). | *h*bar . ba*h*i . rdo . rje . lag . na . thogs . śiṅ . lha . min . rnams . kyis . thub . dka*h* . ba |
| lha . yi . gtso . bo . bde . sogs . bdag . po . rmoṅs . pa*h*i . bsam . pas . rnam . par . *h*khor |
| mtshan . mo . min . daṅ . mtshan . mo . gñid . log . *h*dod . pa*h*i . *h*dam . du . ṅes . par . byiṅ |
| stobs . bcu . mṅa*h* . ba . khyod . ni . rtag . tu . rab . tu . sṅa . bar . nam . laṅs . pa*h*o |

11 (12). | zla . ba . ḳha . ba . ku . mu . da . mtshuṅs . chaṅ . *h*thuṅs[1] . mig . ni . dmar . gyur . la |
| *h*dod . pa . brtan . sra . sgeg . po . thoṅ . gśol . lag . na . *h*dzin . par . brtson |
| stobs . can . de . ni . nam . gru*h*i . mgul . nas . *h*khyud . ciṅ . *h*di . na . ñal . bar . gyur |
| stobs . bcu . mṅa*h* . ba . khyod . ni . rtag . tu . rab . tu . sṅa . bar . nam . laṅs . pa*h*o |

12 (13). | glaṅ . chen . gdoṅ . can . mche . ba . gtsigs[2] . pa . rnam . pa . kun . tu . *h*gegs . byad . pa |
| *h*gram . pa*h*i . ṅos . gñis . myos . chu . rab . *h*bab . nus . pa . sgra . gsaṅ . mthon . po . sgrogs . pa . yi . |
| tshogs . kyi . bdag . po . yaṅ . ni . chaṅ . gi . btuṅ . bas . myos . par . gyur |
| stobs . bcu . mṅa*h* . ba . khyod . ni . rtag . tu . rab . tu . sṅa . bar . nam . laṅs . pa*h*o |

[1] *mthus*, text.
[2] *Sic* for *gcig* ?

अतसिकुसुमनीलो यस्य शक्तिःकराग्रे

नवकमलवपुष्मान् षण्मुखः क्रौंचहन्ता ।

त्रिनयनतनयोऽसौ नित्यसुप्तः कुमारो

दशबल तव नित्यं सुप्रभातं प्रभातं ॥ १३ ॥

कपिलजटकलापो रक्ताताम्रारुणाक्षः

पशुपतिरतिकाले दग्धकोपातिदक्षः ।

स्मरशरदलितांगः सोऽपि सुप्तो ऽतताशो

दशबल तव नित्यं सुप्रभातं प्रभातं ॥ १४ ॥

यमवरुणकुबेरा यक्षदैत्योरगेन्द्रा

दिवि भुवि गगने वा लोकपालास्तथान्ये ।

युवतिमदकटाक्षैर्वीक्षिताश्चेऽपि सुप्ता

दशबल तव नित्यं सुप्रभातं प्रभातं ॥ १५ ॥

ऋषय इह महान्तो वत्सभृग्वंगिराद्याः

क्रतुपुलहवशिष्ठा व्यासवाल्मीकगर्गाः ।

परयुवतिविलासैर्मोहिताश्चेऽपि सुप्ता

दशबल तव नित्यं सुप्रभातं प्रभातं ॥ १६ ॥

13 (14). | zar . ma*h*i . me . tog . ltar . sṅo . gaṅ . gi . lag . pa . mchog . na . mduṅ . thuṅ . thogs |
| padma . sar . pa . lta . bu*h*i . lus . can . gdoṅ . drug . lha . min . khruṅ . khruṅ . bsad |
| mig . gsum . ldan . pa . gẓon . nu*h*i . tshul . can . de . yaṅ . gñid . *h*thug . log . par . gyur |
| stobs . bcu . mṅa*h* . ba . khyod . ni . rtag . tu . rab . tu . sṅa . bar . nam . laṅs . pa*h*o |

14 (11). | gaṅ . ẓig . ral . pa . ser . skya*h*i . tshogs . bstan . dmar . po . zaṅs . mdog . khrag . gi . mig |
| phyugs . bdag . dga*h* . ba*h*i . dusu . gcig . du . chags . pa . *h*joms . par . nus . pa . bo |
| *h*dod . pa*h*i . lha . yi . mda*h* . sreg . lus . can . me . lha . de . yaṅ . gñid . log . gyur |
| stobs . bcu . mṅa*h* . ba . khyod . ni . rtag . tu . rab . tu . sṅa . bar . nam . laṅs . pa*h*o |

15 (17). | gśin . rje . chu . bdag . lus . ṅan . gnod . sbyin . *h*dre . daṅ . lto . *h*phye*h*i . dbaṅ . bo . daṅ |
| de . bẓin . *h*jig . rten . skyoṅ . gẓan . lha . yul . sa . steṅ . namkha*h* . la . gnas . pa |
| gẓon . nu . ma . la . rab . chags . zur . gyi[1] . lha . daṅ . lha . miṇ . rnams . kyaṅ . gñid . log . gyur |
| stobs . bcu . mṅa*h* . ba . khyod . ni . rtag . tu . rab . tu . sṅa . bar . nam . laṅs . pa*h*o |

16. | bas . mtha*h*i . gnas . chen . *h*di . na . draṅ . sroṅ . ṅan . spoṅ . 'aṃ . gi . ra . sogs . daṅ |
| kun . tu . rgya . sogs . gnas . *h*jog . rgyas . pa . grog . mkhar . ba . daṅ . dga*h* . byed . rnams |
| gẓon . nu . mas . skye . gnas . chags . śiṅ . rmoṅs . pa . de . rnams . kyaṅ . gñid . log |
| stobs . bcu . mṅa*h* . ba . khyod . ni . rtag . tu . rab . tu . sṅa . bar . nam . laṅs . pa*h*o |

[1] *Sic* for *gyis?*

भवजलनिधिमग्ना मोहजालावृतांगा

मनुकपिलकणादा भ्रामिता मूढचित्ताः ।

शमसुखपरिहीणा बालिशाखेऽपि सुप्ता

दशबल तव नित्यं सुप्रभातं प्रभातं ॥ १७ ॥

अशनवसनहीना भाव्यमाना विरूपा

अलमखिलविघातैः प्रेतवद्वग्धदेहाः ।

उभयगतिविहीना नित्यसुप्ताश्च नग्ना

दशबल तव नित्यं सुप्रभातं प्रभातं ॥ १८ ॥

सुप्रभातं सुनक्षत्रं श्रेयःप्रत्यभिनन्दितं ।

बुद्धं धर्म्मं च संघं च प्रणमामि दिने दिने ॥ १९ ॥

सुप्रभातं तवैकस्य ज्ञानोन्मीलितचक्षुषः ।

अज्ञानतिमिरान्धानां नित्यमस्तमितो रविः ॥ २० ॥

पुनः प्रभातः पुनरुत्थितो रविः

पुनःशशांकः पुनरेव शर्व्वरी ।

मृत्युर्जरा जन्म तथैव हे मुने

गतागतिं मूढजनो न बुध्यते ॥ २१ ॥

17 (18). | srid . pa*ḥi* . rgya . mtshor . byiṅ . gyur . gti . mug . dra . bas . khebs . pa*ḥi* . lus[1] |
| thub . pa . ser . skya . gzegs . zan . kun . tu . *ḥ*khor . ẓiṅ . blun . pa*ḥi* . bsam . pa . can |
| ẓi . ba*ḥi* . bde . ba . yoṅsu . ñams . pa . de . rnams . kyaṅ . ni . gñid . log . gyur |
| stobs . bcu . mṅa*ḥ* . ba . khyod . ni . rtag . tu . rab . tu . sṅa . bar . nam . laṅs . pa*ḥo* |

18 (15). | zas . la . rab . chags . dman . lus . rtag . par . rnal . *ḥ*byor . rjes . su . dga*ḥ* . gyur . pa |
| gnod . pa . sna . tshogs . rnams . daṅ . ldan . pa*ḥi* . yi . dags[2] . lta . bur . tshig . pa*ḥi* . lus |
| zla . dbuṅ[3] . *ḥ*gro . ba . rnam . bral . gaṅ . yin . gcer . bu . de . rnams . kyaṅ . gñid . log |
| stobs . bcu . mṅa*ḥ* . ba . khyod . ni . rtag . tu . rab . tu . sṅa . bar . nam . laṅs . pa*ḥo* |

[1] A defective line!

[2] *Sic* for *dwags*.

[3] Apparently = *zlas* . *dbye* उभय.

अज्ञाननिद्रारजनि त्वमसि प्रसुप्ता

तृष्णाविशालशयने विषयोपधाने ।

काले शुभाशुभफलं परिकीर्य्यमाणे

जागर्त्ति यः सततमेव नमो ऽस्तु तस्मै ॥ २२ ॥

तीर्थेषु गोकुलशतानि पिबन्ति तोयं

तृप्तिं व्रजन्ति न च तत्क्षयमभ्युपैति ।

एवं मुने कविशतैरपि संस्तुतस्य

न क्षीयते गुणनिधिर्गुणसागरस्य ॥ २३ ॥

स्तुत्वा लोकगुरुं महामुनिवरं सद्धर्म्मपुण्योद्गमं

निर्द्वंद्वं हतरागदोषतिमिरं शान्तेन्द्रियं निःस्पृहं ।

यत्पुण्यं समुपार्जितं खलु मया तेनैव लोको ऽखिलः

प्रत्यूषे स्तुतिहर्षितो दशबले श्रद्धां परां विन्दतां ॥ २४ ॥

22 (19). | mi . śes . mtshan . mo . mun . pa . sregs . pa[1] . mal . cha . *h*thug . gyon . ciṅ |
| yul . gyi . sṅas . rtan[2] . la . ni . rab . *h*thug . gñid . log . gyur . pa*h*i . tshe |
| dge . daṅ . mi . dge*h*i . *h*bras . bu . yoṅsu . *h*dre . log . byed . pa . na |
| rtag . pa . ñid . du . gñid . sad . gaṅ . yin . de . la . phyag . *h*tshalo |

23 (20). | chu . *h*gram . dag . du . ba . laṅ . rigs . brgya . rnams . kyis . chu . *h*thuṅs . te |
| ṅoms . nas . *h*gro . bar . gyur . na*h*aṅ . chu . la . bri . bar . mṅon . pa . med |
| de . bžin . thub . pa . sñan . dṅags . mkhan . brgyas . yaṅ . dag . bstod . gyur . kyaṅ |
| yon . tan . rgya . mtsho . legs . pa*h*i . gter . chen . zad . par . gyur . ma . yin |

24 (21). | rab . tu . nam . naṅs . khyod . gcig . pu . yi . ye . śes . spyan . phye . gyur . bstod . pas |
| *h*jig . rten . gsum . mgon . rta . bdun . *h*od . kyis . *h*gro . *h*di . rtag . tu . snaṅ . byas . te |
| sna . tshogs . lam . thob . lam . ṅan . las . bzlog . *h*byor . ldan . dpal . gyis . byas . pa . dag |
| dgos . mod . raṅ . dgar . bde . blag . dṅos . grub . rnam . pa . kun . tu . spyod . gyur . cig |

| yaṅ . dag . par . rdzogs . pa*h*i . saṅs . rgyas . lags . kha . che*h*i . rgyal . po . śrī . ha . ri . śa . de . vas . bstod . pa . rdzogso ||

[1] *Sic* for *sred*?
[2] *Sic* for *sṅas* . *stan*.

NOTES.

v. 1.—*a.* °यत्नैः: so all the MSS.; Tib. has *gtso* = नाथैः?

b. स्तोत्रवाग्भिः: This appears to be the reading of all the sources; but, since सुविचित्रैः would best go with this word and is so taken by the Tibetan, it appears probable that it is an early mistake for स्तोत्रवाक्यैः or the like.

d. नभसि गरुडयाते . . . यान्ति द्विरेफाः: Minayeff's MSS. vary between गरुडयाते °यन्ते °यान्ते and between यान्ति द्विरेफाः and याति द्विरेफः. The I.O. MS. has याते . . . यान्ते. Minayeff, reading गरुडयन्ते as a denominative, translates "Why do not the bees, since they imitate Garuḍa," etc.; but the Tibetan requires the rendering "In the sky Garuḍa flies, why do not the bees fly?," and this is also demanded by the sense. We must understand गरुडयाते as 'traversed by Garuḍa,' which is grammatically defensible, though awkward. गरुडपातः would depart too far from the MSS., and does not satisfy the balance of the phrase.

संबुद्धमार्ग्ये (Minayeff: I.O. °द्धवार्ग्ये, Calc. °द्धमार्गो) agrees with the Tibetan (*hphags . pa°*).

v. 2.—*c.* सुरचितपरिवेषः (I.O. सुरचिल°, Calc. सुरचिर, Minayeff with three MSS. सुरुचिर°, rendering 'with bright halo') is the reading of one MS.: the Tibetan *lha . yi . tshogs* records a reading सुरकुल°.

v. 3.—*b.* स्त्रीलताजाल°: Since the reading चिलता, which the Tibetan renders 'the three creepers,' will not scan,

we must with Minayeff accept the reading of two MSS. 'the creepers called women,' and find here an error on the part of the Tibetan translators.

c. **समसुखफलदातुर्** 'giver of complete blessing,' Minayeff. The I.O. MS. has **सीम°**. But the Tibetan is doubtless right in suggesting **शम°** *ži* . *ba*. Cf. 17*c*.

v. 4.—*a.* **अग्रजन्माग्रदैव**: Minayeff **°दैव**; 'having won a foremost place of happiness,' Tib., but the verse is unmetrical; omit *yaṅ* and *ba*?

b. **सकलभुवननाथो**, Minayeff; but the I.O. MS. reading **°धातो** (i.e. **°धातौ**) is supported by the Tibetan *°khamsu*.

लोकसृष्ट्येकशब्द् 'the one sound for the creation of the world': the Tib. adds 'resounding loudly in secret,' and omits 'creation'; probably, therefore, it followed a different reading. *Cf. infra* 12*b*.

c. **पद्मयोनिः**: **अब्ज** is unmetrical. Tib. gives **पद्म**, which however is not decisive. The Tib. verse is hypermetrical; omit *can*?

v. 5.—*a.* **विद्रुमच्छेदताम्र**: Tib. has *dmar* . *pohi* . *hod* . *kyis* . *gnaṅ* . *non* . *pa* = *tāmra-prabhayā pīḍayan* (? *gnaṅ* for *gnan*).

b. **तिमिरकुलनिहन्ता**: Minayeff's **तिमिरकिरणहन्ता** 'destroying the darkness with its rays' is grammatically objectionable, and the Tib. gives 'destroying the throngs of darkness.' I.O. has **तिमिरकिलन**.

c. **रविरपि मद्लोल** (Minayeff **°परिलोल**, the MSS. varying between this and **रविपरिमल** and **रविपरिमद्**): Tib. supports this, reading *ñi* . *ma* . *de* . *yaṅ* . *myos* . *pas* . h*phyin* (for h*phyan*) = **रविः सोऽपि मदात् लोल**.

v. 6.—*a.* The Tib. line is short by two syllables.

b. **शर्व्व°**: Two MSS. and Tib. have **सर्व्व°**.

c. **अविगत°**: Does Tib. *dman* . *pahi* . *mdaṅs* . *daṅ* . *bral* . *ba* represent **अविकल[मुख]राग**, or is *bral* an error for h*brel*?

v. 7.—*b.* *ñes* . (or *ṅes* .) . *pa*hi = *niyama* is obscure. ? read *ṅi* . *ba*hi. Note °पिन्न° .

v. 8.—*b.* सुररिपुवरहन्ता (so Minayeff and Tib.): two MSS. give °वल° and °वल° .

v. 9.—*a.* *thogs* . *pa* . h*chaṅ* (= उपवीत) should perhaps be *thag* . *pa* . h*chaṅ* 'wearing a cord.'

c. *dreg*, also (? = 'pride'), is perhaps an error for *des* 'by him.'

v. 10.—*a.* दानवानां (I.O.; Minayeff दानवारिः) is supported by the Tib. *lha* . *min* . *rnams* . *kyis* . *thub* . *dka*h . *ba*.

b. मूढचेताः I.O.; Minayeff °चित्तः, but one of his MSS. has °चेता and another °चित्ता .

v. 11.—*b.* °भुजांग (so also Minayeff), while the Tib. *sgeg* . *po* probably represents °भुजंग . Tib. also probably read लांगलासक्तहस्तो (*thoṅ* . *gsol* . *lag* . *na* . h*dzin* . *par* . *brtson*) for लांगली शक्तिहस्तो, but the line lacks two syllables: the I.O. MS. gives लांगलिसक्तोहस्ता .

v. 12.—*a.* सर्व्वतो (Minayeff and Tib. °था), the reading of the I.O. MS. and two others, seems preferable.

b. विगलितमद्धार : the अविगत° of two MSS. leaves a hiatus. Tib. represents गण्डतटद्वयमद्प्रस्रवणदत्त .

षट्पदाकीर्णगण्डः (so Minayeff; I.O. °दायोन°): the Tib. *sgra* . *gsaṅ* . *mthon* . *po* . *sgrogs* . *pa* is an unmetrical insertion from v. 4, which has displaced the rendering of this phrase.

v. 13.—*c.* चिनयन° : The text here given is that of Minayeff, which however is not entirely satisfactory. Two MSS. give नित्यसुप्तो, and the Tib. seems (h*thug*) to imply some adverb. In supplying चिनयनः कुमारशील (*mig* . *gsum* . *ldan* . *pa* . *gźon* . *nuhi* . *tshul* . *can*) it must be mistaken.

v. 14.—*b.* पशुपतिरतिकाले (= Tib. *phyugs* . *bdag* . *dga*h . *ba*hi . *dusu*) comes nearest to the I.O. and two other MSS. (°तिरति°).

दग्ध°: Tib. *gcig . tu . chags . pa°* apparently implies **एककामातिदग्धः**, which will however not scan unless we read **कालेषु** (for **काले**) before it. This is very likely what underlies the unintelligible **कालेषदधिकावातदग्धः** of the I.O. MS. But on the other hand the Tib. *gcig . tu* may be an error for *tshig . pa* = **दग्ध**. Was the original **दग्धकामैकदग्धः**?

c. **स्मरशरदलितांग** (Tib. *hdod . pahi . lha . yi . mdah . sreg . lus . can*, where *sreg* 'burn' is probably a mistake for *gsàgs* **दलित**): Minayeff's **समरसदलितांग** gives no meaning.

v. 15.—*c.* **युवतिमदकटाचैर्वीक्षितास्** is the reading of all the MSS.: Tib. *gzon . nu . ma . la . rab . chags . zur . gyi . lha . dan . lha . min . rnams* = **युवतिमदकटाचा देवासुरास्** does not correspond, and the verse is hypermetrical. Was the original *zur . gyis . blta* (**वीक्षिताः**) . *de . rnams . kyan*?

v. 16.—In this verse the Tib. text is very corrupt and the equivalents in some cases uncertain. We have *nan . spon* = **भृगु**, *'am . gi . ra* = **अंगिरस्**, *rgyas . pa* = **व्यास**, *grog . mkhar . pa* = **वाल्मीकि**; is *dgah . byed* = **गर्ग**, and is *kun . tu* miswritten for **क्रतु**? *Bsam . tha* 'suburb' and *gnas . chen* 'great place' are no doubt stupid errors. In l. 3 there are two syllables wanting, and the expression *gzon . nu . mas . skye . gnas . chags* is meaningless.

In the Sanskrit we must note the faulty sandhi of **अंगिराद्य** (Minayeff **आं**).

v. 17.—*c.* **श्रमसुखपरिहीणास्** (so I.O. MS. and Tib.): Minayeff reads **सम° °फलहीनास्**. In *b* he has **कणाद्या**.

बालिशास् is omitted in the Tib., which also reads **मुनि** (*thub . pa*) for **मनु**.

v. 18.—The I.O. MS. here agrees with Minayeff's text, which I print. The Tib. must have read अशनवशन (or व्यसन!), followed perhaps by नित्ययोगानुनन्दाः. It omits अलं. What is भाव्यमानाः?

vv. 19-21 are illegible in the I.O. MS., and wanting in the Tibetan. Minayeff's text agrees (except that he has श्रिया for श्रेयः) with the Jain *Suprabhāta*, in which also vv. 19-20, *mutatis mutandis*, recur. In v. 21 he has बुध्यति.

v. 22.—परिकीर्य्यमाणे (I.O. and Tib.) seems preferable to Minayeff's परिकीर्त्तमानो, and it is supported by the Tibetan; but both are grammatically open to objection (परिकीर्य्यमाणे active, 'scattering round'!).

v. 23.—*c.* कविशतैरपिसंस्तुतस्य (so I.O. and Tib.): Minayeff कविशतानिपिवन्ति.

v. 24.—The place of this verse is supplied, in the Tibetan, by a different one, perhaps in Sragdharā metre, which we may tentatively render as follows:—"Having hymned thee, the dawn who art the sole powder to the eye of the mind (*or* the knowledge of thee, the only dawn, which is a powder to the eye), while the ruler of the three worlds, he of the seven steeds, ever illumines this universe with his rays, may those who by their fortunate glory have put an end to the path of evil that occupied every path in every way enjoy a desired elevation with happiness according to their will." Variants in Minayeff's text are पुण्यद्रुमं, अखिनं, परा-, for पुण्योद्गमं, अखिलः, and परा.

ART. XXV.—*Note on Nicolaò Manucci and his "Storia do Mogor."* By WILLIAM IRVINE, M.R.A.S., late of the Bengal Civil Service.

IN 1705 there appeared at Paris a work entitled "Histoire générale de l'empire mogol depuis sa fondation, sur les Mémoires portugais de M. Manouchi, Venitien" (4to, pp. 272, also in 12mo, 2 vols.), by Father François Catrou, of the Company of Jésus. The narrative breaks off at the end of the war of succession between Aurangzeb and his brothers (1658–9). In 1715 the same writer supplemented the above work by bringing out what he calls a Third Part (4to, pp. 107), in which he continues the story to the year 1707 and the battle near Agrah between two sons of Aurangzeb. Besides the Hague editions in 1708 of the French text of 1705, English translations of it appeared in 1708, 1722 (second edition), and 1826 (a new translation); and an Italian version was published at Venice in 1731. Neither in English nor Italian is there any edition of the continuation published by Catrou in 1715.

So far as I am aware, Robert Orme was the first historian to make use of Catrou's work. As soon as the first volume of his "Military Transactions" was published (1763), or even earlier, Orme began to collect materials for his projected continuation, of which all that was ever written appeared in 1782 under the title of "Historical Fragments" (164 pages in the 4to edition of 1805). In the index, under either "Catrou" or "Manouchi," there are nineteen references. In his first note on the book (Note iv), he says of the manuscript that it is "supposed to have been carried into Holland, and is well worth recovering." The

same note, after praising the elegance of Catrou's style, comments on the want of chronological arrangement. Both Grant Duff, "History of the Mahrattas" (1826), and Mountstuart Elphinstone, "History of India" (1841), quote Catrou (Manucci), sometimes with approval, at other times with considerable hesitation. Mr. Edward Thomas, in his "Revenue Resources of the Mughal Empire in India, 1593 to 1707" (1871), relies almost exclusively upon the figures given by Catrou (4to edition of 1705, pp. 264–266). In two later histories the evidence of Catrou (Manucci) is even more largely referred to with either praise or depreciation.

In 1876 the late J. Talboys Wheeler issued vol. iv, part 1, of his "History of India from the Earliest Ages." On p. xii of the Introduction to this volume Mr. Wheeler writes: "The history of Father Catrou has often been cited in the present work. It forms the very best authority for the history of the reign of Shahjahan. Catrou's history of this period is in accord with that of Bernier. Catrou is far more successful than Bernier in bringing out the true character of the leaders in the great war which brought the reign of Shahjahan to a close. Manouchi must have sent to Europe copies of the correspondence between the prominent actors. Catrou quotes letters which reveal the inner nature and disposition of the writers. The substance is given in the sixth chapter of the present volume. They impart a dramatic character to the history." Mr. Wheeler returns to the subject in the Introduction to vol. iv, part 2, published in 1881, adding in a note on p. viii: "the original memoirs written in Portuguese, which Manouchi sent to Europe in the beginning of the last [i.e. the eighteenth] century, have not yet been discovered."

The next writer who quotes frequently from Catrou (there are ten entries in his index) is Professor S. Lane-Poole in his "Aurangzeb" ("Rulers of India," 1893). His verdict on Manucci is as depreciatory as Talboys Wheeler's is laudatory. According to him the work is full of errors, it savours strongly of the *chronique scandaleuse*, it is the

production of a malicious and disappointed backstairs underling; on the other hand, the "Histoire" by Catrou "would be invaluable, if there were any means of authenticating it by comparison with Manucci's MS." Probably the truth lies between these two extremes, but will be found very much nearer to Talboys Wheeler's than to Lane-Poole's position. Again, there is an article on "Travels in the Mogul Empire" in the *Quarterly Review* for April, 1893 (p. 519), which is most probably from the hand of Professor S. Lane-Poole, where the question of Manucci's authority as a writer of history is thus summed up:—"Much of this criticism may be successfully combated, if the Portuguese text can be produced and the blame for the numerous errors of the published work thrown upon the editor. But until this is done Catrou-Manouchi cannot safely be relied upon as an authority for Mogul history." My object here is to show that the Portuguese (and in parts French) text of Manucci can be produced, that, in fact, two copies of that text are in existence, that it can be translated and published by anyone who will undertake the labour and expense of such a task. I am already in possession of transcripts of the text which have been made for me at Berlin and Venice.

In 1700 Nicolaò Manucci sent from Madras by the hands of M. Deslandes, a Pondicherry official, the first three parts of "Storia do Mogor." Owing to M. Deslandes' appointment (28th Dec., 1703) to the West Indies, where he died on the 13th Feb., 1706, the project fell through of publishing the work under the auspices of Louis XIV. In India the Jesuits had already attempted in vain to obtain possession of it; in Europe they were more successful. M. Deslandes lent the MS. to Père Catrou, and the result was the publication of the "Histoire," as already stated. The MS. was deposited in the Jesuit College of Claremont at Paris; a building situated opposite St. Etienne-du-Mont and behind the Panthéon, on the site of the present Lycée Henri IV. On the expulsion of the Jesuits, the sale of their property was decreed, and Manucci's MS. was entered as

No. 856 in the list drawn up by the Commissary under the *Arrêt* of the 5th July, 1763. Baron Gérard Meermann (1722–1774) bought and took to the Hague 349 MSS., among them the three volumes of the "Storia do Mogor." On the death of his son, Comte Jean Meermann (1753–1825), the Jesuit MSS., then reduced to 250 in number, were sold. Of these 190 (including the "Storia do Mogor") were acquired by Sir Thomas Phillipps, the great collector of Middle Hill, Worcestershire, and Thirlestane House, Cheltenham. The Manucci work is entered as General No. 1945 in the privately printed "Catalogus Librorum . . . . ab anno 1824 ad 1837," under the title "Historia de Mogol." After the death of Sir Thomas Phillipps, his heirs began to sell his vast collections; and in 1887 the Königliche Bibliothek at Berlin bought a number of his manuscripts, in the purchase being included the "Storia do Mogor." The three volumes are now in the said Royal Library at Berlin, under the designation of Phillipps No. 1945; and they are fully catalogued on p. 24 of "Die Romanische Meermann Handschriften des Sir Thomas Phillipps in der königlichen Bibliotheke zu Berlin, beschrieben von Alfred Schulze" (4to, Berlin, 1892). In 1901 the three volumes were transcribed for me by Herr A. Otto, whose services were very kindly procured for me by Professor L. Stern, the Librarian.

After the dispatch to Europe of three parts, bringing events up to 1700, Manucci went on with a fourth part, commencing with the eighteenth century (1701). Some time in 1704 or 1705 (the "approbation" or permission to print is dated the 10th April, 1704) Catrou sent to Manucci an advance copy of his preface. Manucci was very angry; he wrote in regard to Catrou, "But seeing that he meant to make the work one to his own glory, and mix me up with the fables told by other authors, thereby usurping the result of my labours and fatigues during so many years, and of my great expenditure, while he would have the coin and honour; I requested him to return the work to me." To make sure of non-suppression, Manucci

sent to Europe the original rough draft of the first three parts, and the new fourth part, by the hands of Father Eusebius, of Bourges, a French Capucin, to whom he made over a Latin letter to the Doge and Senate of Venice, dated Madraspaten (i.e. Madras), the 15th January, 1705 (170$\frac{5}{6}$?). These documents were made over to Lorenzo Tiepolo (1673–1742), Venetian ambassador to France (1701–1708), and by him transmitted to the Senate, who deposited them in the Library of St. Mark (which in 1902 was housed in the Doge's Palace). The fifth part (which only exists in full in Italian) reached Venice at some date before February, 1712. In 1741, when the above-named L. Tiepolo had become Librarian of St. Mark, A. M. Zanetti and another published at Venice a folio volume "Latina et Italica D. Marci Bibliotheca Codicum manu-scriptorum . . . ." On pp. 235, 236, Zanetti gives a full description of Manucci's MS. of 778 folios, Codex No. xliv. He also describes Codex xlv, of 740 folios, which is a translation of No. xliv into Italian by Conte Stefano Nivibus Cardeira, Portuguese, the Professor of Civil Law in the University of Padua. There were also in Zanetti's time two volumes of pictures, one of portraits, the other of gods and goddesses. From the former of these volumes the cataloguer gives some reproductions in the shape of three very fine copper-plate engravings of (1) Taimur and thirty-one other figures, (2) Aurangzeb, an old man on a white horse, reading, twenty-five figures on foot, (3) a portrait of N. Manucci, a stout, white-faced man, entirely shaven, dressed in Indian costume, looking to left, and feeling the pulse of a very dark man. Part iv from Codex xliv and part v from Codex xlv were transcribed for me in 1902 by Signori Gilberto Mioni and Carlo Alberto Corti, of the St. Mark Library, through the good offices of Professor Dottore Giulio Cóggiola, sub-librarian.

As mentioned in the last paragraph, it would appear that besides his manuscript Manucci sent to Europe two volumes of paintings. Of these only one is now forthcoming at Venice, Classe vi, Codice cxxxvi, pictures of gods and

goddesses, with a few battle-pieces, all in colours, and two plans of a battle (that of Jājau in June, 1707). The volume bears a large book-plate with the arms of Venice, the year 1722, and the name of the then librarian, Hieronomo Veniero. Of the portraits the only trace left at Venice is in Classe vi, Codice ccclxv, which consists of Italian descriptions of each portrait. Cardinal Placido Zurla, writing in 1818, "Di Marco Polo . . . ," says on p. 293 that the Manucci MS., "one of the ornaments of the library, had been irrecoverably mislaid (*smarrito*) in the late political troubles." The librarian thinks this a very inexact statement; he holds that one volume was stolen (*rapito*), not mislaid. The manuscripts Cod. xliv and xlv were apparently never appropriated or removed by the French. But the volume of portraits was made over in 1797 to the French commissary, M. Brunet, was removed to Paris, and has never been restored. The volume is now in the Bibliothèque Nationale at Paris, department of Engravings, No. O.D. 45, réserve; and although rebound in scarlet morocco, sprinkled with the imperial bees in gold, it still bears inserted in the centre of the cover the diamond-shaped impress (on calf leather) of the San Marco Library, identical with that on the outside of Codex xliv (Zanetti) still at Venice. There is a list of the fifty-six pictures, "d'une splendide exécution" in E. Blochet's "Inventaire et Déscription . . . . " (Paris, 1900). M. Blochet had already reproduced one of these pictures in "Gazette des Beaux Arts" (1897), p. 281, the portrait of Khusrū, son of Jahāngīr.

Let me now turn to what I have found in Manucci, so far as I have yet been able to study him. In the very first chapter, the account of his journey from Venice to India, he throws unexpected light on an obscure, one might almost say an unknown, episode in the diplomatic relations of England with Persia, the mission of Viscount Bellamont (Henry Bard) from the exiled Charles II to Shāh Abbās. Manucci, a lad who had run away from home, was taken into the service of Lord Bellamont, and travelled with him from Smyrna to Qazwin, Ispahan, Shiraz, Gombroon (Bandar Abbās), Surat,

Burhānpur, Sironj, Dholpur, and Agrah. Manucci was with the ambassador when he died suddenly in June (1656?) near Hodal, a *sarāe* on the road between Mathurā and Dihli. Dr. C. H. Firth, of Oxford, the greatest living authority on the history of that period, is prepared to accept Manucci's account of Bellamont's mission in preference to that in the "Dictionary of National Biography," which is in Dr. Firth's opinion very unsatisfactory. Bellamont's doings in Persia and his arrival at Surat (January, 1656) are confirmed by records still in the India Office; though, unfortunately, the archives of the East India Company become defective at this point; and I can trace no report of the ambassador's progress beyond Surat.

In one way, more than in any other, Catrou has wronged Manucci; I refer to the total suppression of Manucci's personal narrative, thereby giving rise, as I believe, to the greater part of the adverse comment on the historical portion of the "Storia" which he has introduced into his "*Histoire.*" The unpublished text is full of Manucci's own adventures; and it is these, mostly interesting for their own sake and excellently narrated, which give to his work a vivacity and naturalness that go far to remove the feeling of distrust inspired by a perusal of Catrou's "Histoire." Catrou was too much concerned with classical models, elegance of style, and the dignity of history to do justice to a writer like Manucci. Moreover, Catrou's method of dealing with his authority suppresses one fact, on which I would insist, the unusual range of Manucci's journeyings in India.

Not only did Manucci know Agrah and Dihli, but he had lived for years at Lahor; had been for months besieged in Bhakkar fort in Sind; had travelled from Agrah viâ Allahabad, Benares, Patnah, Dhakka, and Balasore to Hugli, thence back by Qasimbazar, Rājmahal, Patnah, and Allahabad to Agrah and Dihli. As captain of Rājah Jai Singh's artillery, he marched from Dihli to Aurangābād and thence towards Bijapur; resigning that service, he proceeded to Bassein and Goa. Returning to Hindustan he settled as

a physician at Lahor; next he removed to Bandora, nine miles north of Bombay, but on the loss of his fortune, returned to Dihli. In 1679 the eldest Prince (Muḥammad Mu'aẓẓam, Shāh 'Ālam) took him as his physician, and he accompanied his employer first to the Dakhin, then on the return march to Chitor and Ajmer and took part in the campaign against the Rānā and Prince Akbar; finally accompanying the imperial army from Ajmer to Aurangābād (1681). On a pretext of two months' leave, he quitted the army (1682 or 1683) and found his way viâ Surat and Damaun to Goa. There he played a part in the negociations between the Portuguese on the one hand, and Sambhā Jī, Mahrattah, and Shāh 'Ālam on the other. For these services he obtained from the Portuguese in 1684 the order of St. Jago. On visiting Shāh 'Ālam's camp, that prince detained him and made him resume his duties; but soon he managed to escape to Gūlkhandah and thence to the east coast. From 1686 he lived at Madras, where he married the widow of an Englishman, and owned a house and garden. He died at some unascertained date subsequent to February 1709, having been employed several times by Governor Pitt as a negociator. Such a range of experience is, I think, unparalleled in the case of any other writer of his class.

I will now run rapidly over the chief historical events that are dealt with by Manucci, in regard to which he was a contemporary, and in some cases an eye-witness. He was present with the army under Dārā Shukoh which left Agrah on the 14th May, 1658, and he took part in the fatal battle of Samūgarh on the 4th June, 1658. He was in Aurangzeb's camp when Murād Bakhsh was entrapped and seized; he joined Dārā at Lāhor, marched with him to Bhakkar, and commanded the artillery during its investment. He describes the circumstances of Dārā's betrayal and death, and the merited fate of his betrayer. He recounts the story of Tarbīyat Khān's embassy to the Persian monarch, the insults he received, the burning of his beard, and the ribald parody of 'Ālamgīr's coin, as then current at the Persian Court—

Sikkah zad ba qurṣ-i-panīr
Barādar-kush-i-pidar-gīr.[1]

"Struck coin on a round of cheese
The brother-slayer, the father-seizer."

The campaign round Goa is fully treated (1683–1686), and the Mogul attacks on and conquest of Gūlkhandah (1685–1687) are well described. In the later years (1686–1709) there is a most interesting account of the heathen practices which the Jesuits allowed to continue among their converts, of the origin and progress of the persecutions of Christians at Tanjor, of the quarrels between the Jesuits and the Capucins over the spiritual charge of Madras, of the visit of enquiry by Cardinal Charles Thomas de Tournon (1668–1710), Patriarch of Antioch. There are also the detailed report of a case before the Inquisition at Goa in 1650, given to the author by Father Ephrem, Capucin, the accused (he was Roman Catholic chaplain of Madras, and died there in 1694); and a statement of the dispute between the Jesuits and Capucins, most spiritedly written, possibly by a priest and not by Manucci himself, reinforced with copious quotations from the Vulgate. Then we have many detailed accounts of Aurangzeb's movements between 1700 and 1707, with references to the desolate state of the country, a long drought from 1702 to 1704, and the encroachments of the Mahrattahs at Masulipatam and as far north as Gwāliyār. When Madras was invested by Dāūd Khān in 1702, Manucci and a Brahman were sent out to negociate; and our author tells the whole story from his point of view. There is also an excellent account of an attack on Cuddalore by Sulaimān Khān, Pannī, brother of Dāūd Khān. In short, the work positively teems with facts and is of the most absorbing interest; it would

[1] The original words thus imitated in sound are:—

Sikkah zad dar jahān chū mihr-i-manīr
Shāh Aurangzeb-i-'Ālamgīr.

The chief offence to the Shāh of Persia came from the title taken by 'Ālamgīr, the "World-seizer"; and the Persian Court referred to the Indian Emperor as the "Black-man."

cover many pages if I gave merely the barest enumeration of names, places, and events occurring in it.

This is neither the place nor the time for a critical examination of Manucci's merits or demerits as an historian. But I have said enough, as it seems to me, to prove that no writer of Indian history for the period covered by him (1658–1709) will be worthy of serious attention unless he can show that he has diligently studied and thoroughly digested the text of Manucci. Credulous, superstitious, at times garrulous, he may be; but he was a keen observer with unusual opportunities. It is little better than a commonplace to remark on the value to the historian of the East of first-hand narratives by European contemporaries. What to the Oriental is self-evident and a matter of course, strikes the European as novel and worthy of record; and the way that a European presents the facts is much more likely to be understood by us. The inestimable value of Bernier's work has never been disputed; in my opinion, Manucci, although inferior in some respects, is in others distinctly superior. Manucci ought to occupy a place at Bernier's side as the best European authority for the history of India in the years succeeding those dealt with by the earlier writer.

June 22nd, 1903.

SUPPLEMENTARY REMARKS.

Since writing the above Note, I have come across three other references to Manucci. In "Studii Biografici e Bibliografici sulla Storia della Geografia in Italia," by P. Amat de S. Filippo (2nd ed., 2 vols., 8vo, Roma, 1882), there is on p. 440, vol. i, an entry devoted to Nicolaò Manucci. Reference is made therein to the original manuscript in the Marciana library at Venice and to the Italian translation by the Conte Stefano a Nivibus Cardeira. Three sources are quoted—Legrenzi, Foscarini, and Zurla. I have already referred to Cardinal Zurla's work. Angiolo Legrenzi,

Venetian, published a small book at Venice in 1705 called "Il Pellegrino nell' Asia . . . ," in a preface and four parts. The third book, pp. 192–310 of part ii, contains his travels in India; and on p. 223 he speaks of meeting Manucci at Aurangābād in 1679. In part v, folio 221, Manucci mentions the visit of this Angiolo Legrenzi to Aurangābād. Marco Nicolaò Foscarini (born 4th February, 1695, died 31st March, 1763, Doge from 1762) published in 1752 his "Della Litteratura Veneziana." On p. 441 (edition of 1854) Foscarini speaks of Manucci (calling him in error *Antonio* Manuzio), of the manuscript in the Marciana, and of Catrou's French "Histoire." Foscarini emits the sound criticism that few will approve of the entire suppression by the Frenchman of Manucci's strictures on the Jesuits' mode of conducting Christian missions in India. In addition to the passages referring to missions it would be possible, as Foscarini points out, to collect from parts i to iii many things entirely omitted by Catrou, such as strange and excellent information about the natural history of Hindūstān and the social customs of the people, Hindū and Mahomedan. "There is also much in parts iv and v, those that Catrou never saw"; and from the "Storia" could be put together a life of Manucci, *che fù piena d'accidenti curiosi.* Foscarini had heard that Manucci died in 1717 as an octogenarian. Strangely enough I discovered a few days ago, quite by accident, that Miss Manning possesses a set of Indian views (lithographs) taken from some Italian book (not yet identified). Among these are four coloured portraits, of which two, those of Akbar and Aurangzeb, purport to be taken "from a manuscript of Manucci." It may turn out when the book is found that these were copied from the volume O.D. 45, *réserve,* now in Paris.

July 1st, 1903.

ART. XXVI.—*An early Judæo-Persian Document from Khotan, in the Stein Collection, with other early Persian Documents.* By D. S. MARGOLIOUTH; with an Introductory Note by M. A. STEIN and communications from W. Bacher, A. E. Cowley, and J. Wiesner.

INTRODUCTORY NOTE.

THE early Persian document written in Hebrew characters which Professor D. S. MARGOLIOUTH has at my request kindly undertaken to publish, and of which his present paper is intended to furnish a preliminary account, was obtained by me in the course of my journey of archæological exploration in Chinese Turkestan carried out during 1900–1, under the orders of the Government of India.

Small as this fragmentary document might appear by the side of the ample finds of ancient manuscripts and records in Kharoshṭhī and Brāhmī, Tibetan and Chinese, which rewarded my excavations at sand-buried sites of the Khotan desert, I did not fail to recognise from the first its claim to special interest, as it is the sole specimen of early Hebrew script which has as yet come to light in that region. But the particular circumstances attending its discovery made it desirable to postpone any notice until the doubts to which they might give rise had been critically examined, and if possible also settled, by competent experts. These opinions of experts did not become available to me until after I had prepared my *Preliminary Report* on the journey as well as my *Personal Narrative* of it, which has now been

published.[1] It has thus been left for the present occasion briefly to relate the circumstances in which the document was obtained by me, and to explain the conclusions which, I believe, can be drawn from them as to its probable origin and date.

In Chapters XVIII.–XX. of my *Personal Narrative* I have already given a fairly detailed description of my explorations at the ancient site known to Khotan 'treasure-seekers' by the name of *Dandān-Uiliq* and situated among the dunes of the Taklamakān desert, some seventy miles to the N.E. of the Khotan oasis.[2] By means of almost continuous excavation work which kept me and my little force of labourers busy from morning until nightfall, I had succeeded between the 18th December, 1900, and 4th January, 1901, in clearing the interiors of those numerous small Buddhist shrines and dwelling-houses, the remains of which, scattered in groups over the ruined area, could be traced under the cover of drift sand. Apart from many interesting remains of Buddhist art in the form of stucco relievos, painted panels and frescoes, these excavations yielded ample finds of manuscript leaves in Sanskrit and a Central-Asian language (in Brāhmī script), as well as of Chinese documents,—all these are written on paper.

But the occurrence of these epigraphic relics was very unequal, some of the largest of the structures brought to light proving in this respect complete 'blanks.' There was ample evidence to support the statement of Turdi, the honest old 'treasure-seeker,' who served me as guide, that several of the ruins, even such as I found covered up again by deep sand, had on one or the other occasion been dug into and disturbed by parties of adventurous natives. These periodically visit the site in search of 'treasure' during the

[1] *Preliminary Report on a journey of archæological and topographical exploration in Chinese Turkestan*, by M. A. Stein, Indian Educational Service. Published under the authority of H.M.'s Secretary of State for India in Council. London, 1901; pp. 71, quarto, with 16 plates.

Sand-buried ruins of Khotan: Personal Narrative of a journey of archæological and geographical exploration in Chinese Turkestan, with a map from original surveys and numerous illustrations, by M. Aurel Stein. London (T. Fisher Unwin), 1903; pp. xliii + 524, 8vo.

[2] See *Sand-buried ruins of Khotan*, pp. 281–324.

winter, when the absence of sand-storms renders the dreaded desert accessible, and the condition of some structures which the movement of the dunes had left more or less exposed during recent years fully illustrated the destructive results of their operations.[1]

By the 4th of January, 1901, I had completed the task which, with due regard to the prevailing conditions of the site and the available working season, I could hope to accomplish at Dandān-Uiliq. I accordingly hastened to transfer my camp to some ruins known by the name of *Rawak*, which Turdi had reported to me as situated at the distance of a day's march among the higher dunes northward. As I knew these remains to be small in extent and not likely to offer much scope for excavations, I decided before leaving Dandān-Uiliq to pay off and dismiss to their home a portion of my contingent of labourers whom the privations and fatigues of the preceding weeks of hard work in the wintry desert had already severely tried. On the evening of the following day, when returning from the examination of the ruined structures briefly described in my *Personal Narrative*,[2] I was surprised to find my Rawak camp joined again by a small party from among the men I had dismissed at Dandān-Uiliq. Apparently more enterprising than the rest, they had put off the start on the weary tramp across the sand-dunes back to the Tawakkēl oasis, in order to indulge freely for a day or two in that traditional pastime described as 'treasure-seeking' at ancient sites, which, like washing for gold and jade-digging near the river-beds, presents to the average Khotan cultivator all the fascinations of a kind of lottery.[3]

They related that while 'prospecting' in their own fashion among the ruins, they had scraped away the sand outside the broken east wall of an ancient dwelling-house (marked by me D. XIII.), the remains of which lay not far to the south of my former camping-place. The interior of this fairly

[1] Compare *Ruins of Khotan*, pp. 278, 307, 321.
[2] See *Ruins of Khotan*, pp. 326 sq.
[3] Compare *Ruins of Khotan*, pp. 202, 257, 279, etc.

conspicuous ruin had previously been cleared under my supervision from the sand filling it, but without any objects being found apart from a large mud-built fireplace and a wooden cornice. According to the information then given by Turdi, a considerable number of large silver pieces, in the customary shape of the Chinese horse-shoes or 'Yambus,' had been discovered in this house some thirty years previously, when he was a youth. He also well remembered that the ruin had subsequently been repeatedly searched by other treasure-seeking parties in the vain hope of similar lucky hauls.

My Tawakkēl labourers, who had also wished to try their luck here, declared their search for 'silver or gold' to have been equally fruitless. But while scraping among what appears to have been miscellaneous débris thrown outside by previous treasure-seekers, they had come upon the two antiques which they now brought to me in the hope of a reward. One of them was a piece of coarse stucco, of the same kind as that found applied as wall-plaster in most of the Dandān-Uiliq buildings, showing some much-effaced Chinese characters arranged in three lines within a frame of black lines measuring about 5 by 3 inches.

The other find, as it then presented itself, was a lump of thin brownish paper, so closely crumpled up that in the absence of proper appliances I found it quite impossible to attempt its opening and unfolding. Only where one edge of the paper could be partially loosened was I able to make out some characters which manifestly looked like cursive Hebrew. It was not until this compressed mass of ancient waste-paper had undergone careful treatment under the expert hands of Mr. Hunt, of the Manuscript Department of the British Museum, that it resolved itself into the relatively large but unfortunately much-mutilated fragment of the Judæo-Persian document discussed below by Professor Margoliouth. The extant portion of the document, with its closely written thirty-seven lines, covers one side of a piece of paper nearly 16 inches in height, and apparently preserving its original dimensions in that direction. The

original width of the paper cannot be ascertained, as on either side the fragment is badly torn and presents ragged edges, the actual width varying from 4 to 8 inches.

The circumstances in which these two finds had reached me made me at the time with special keenness regret the limitations of my philological equipment; it comprises neither a knowledge of Chinese nor of Hebrew, and consequently I was unable even approximately to judge from the scripts themselves as to the character and age of the objects brought before me. Yet it was evident that a definite opinion as regards their origin and critical value could safely be based only upon such internal proofs as the analysis of these remains would disclose. They had not been unearthed in my presence nor under my directions, and I felt bound to attach importance to this want of decisive personal observation in view of what evidence previously collected at Khotan had taught me of possible risks of imposture.

The story of Islām Ākhūn's forgeries, which I had then already strong reasons to suspect, and which I subsequently was able to expose in full detail, has been told by me elsewhere.[1] It is true that the 'ancient manuscripts' and 'block prints' manufactured by this clever scoundrel, which for some years found such ready sale among European travellers and collectors, invariably showed only 'unknown characters,' the forgers never having succeeded in imitating the characters of any known script in a consecutive text. There was also the reassuring fact that Islām Ākhūn had been cautious enough to keep himself and his productions carefully out of my way. Besides, it would have required a strong detective imagination to trace any connection between the forger then away from Khotan and the labourers I had personally selected for my expedition to Dandān-Uiliq from among the young agriculturists of the Tawakkēl hamlets.

Yet impressed as I was with the necessity of being constantly on my guard, I had endeavoured to exercise

[1] See *Ruins of Khotan*, Chap. XXXI. (pp. 469–481); *Preliminary Report*, pp. 464 sqq.

the closest watch while the excavations at the site were proceeding in order to be able by immediate personal observation to authenticate any antiquarian objects brought to light. Hence I felt all the more thoroughly the want of equally precise testimony in the case of the two curious finds brought to me after my departure from Dandān-Uiliq. I closely examined the several men who alleged to have been present at their discovery, and found that their separate statements mutually agreed well. A post-factum inspection of the find-place with a view to testing the correctness of their report, held out little hope of additional assurance; for I knew it was useless to expect that the loose sand outside the ruined structure from which those small objects had avowedly been scraped out, should retain any distinct trace of their original position.

In the end consideration for the serious practical difficulties ahead obliged me to abandon the thought of a return to Dandān-Uiliq. I was on the eve of the trying march which was to take me and my camp in accordance with previous arrangements across the desert to the Keriya River. My camels, which had rejoined me from the jungle along the latter, and by which alone the move could be effected, had subsisted on the scantiest of rations and practically without water for fully five days already. They had now to face three more days' difficult marching across truly formidable dunes of sand, and under baggage loads which, owing to the impossibility of using other transport, were exceptionally heavy. A return to Dandān-Uiliq against the original carefully calculated programme, would have cost a delay of at least one or two days, and there was reason to fear that this delay might lead in the end to a breakdown of the severely tried animals. Such an eventuality would have implied great loss of time, if not other serious risks besides, and against them the doubtful chance of profitable investigations at Dandān-Uiliq presented no adequate set-off. On these grounds I finally decided, by the morning of the 6th January, for the direct march to the Keriya River, as described in my *Personal Narrative*.

We shall be able better to appreciate the definite bearing of the internal evidence afforded by the Judæo-Persian document upon the question of its character and age, after a brief review of the explanations which *à priori* present themselves as to its real origin. After prolonged consideration of all circumstances, both in the light of my observations at the time and of subsequent experiences, I feel assured that the possibilities with which we have to concern ourselves are restricted to the following. *Either* the document and the small Chinese inscription were found by the men under the alleged conditions near one of the ruined buildings of Dandān-Uiliq; *or* they had been abstracted in the course of my excavations at one or the other structure of that site and secreted for a time by the labourers concerned, with a view to securing some special reward on their subsequent delivery; *or* these objects were of modern origin and had been purposely taken along from Tawakkēl or Khotan to Dandān-Uiliq, on the chance of an opportunity somehow offering to sell them to me as genuine antiquities. In view of what my subsequent investigations disclosed about Islām Ākhūn's activity at Khotan, I shall scarcely be held over-suspicious for having given serious attention for a time to the last-named supposition, far-fetched as it might appear.

There were from the first several weighty considerations against it; but fortunately it is no longer necessary to examine these in detail since the expert analysis of the Judæo-Persian document, as recorded in the contributions below, has furnished conclusive proof of its antiquity both in respect of its script and its paper.

In regard to the latter point special importance must attach to the result of the microscopical examination which Hofrath J. WIESNER, Professor of the Vienna University and Director of its Institute for plant-physiology, has, at my request, been kind enough to effect of a specimen taken from the narrow available margin of the document. To Professor Wiesner belongs the merit of having, in the course of his researches in connection with the paper documents of the Archduke Regnier's collection from Fayūm, for the first

time elucidated on a scientific basis the earliest history of paper manufacture in the Muhammadan East.[1] He has subsequently devoted prolonged investigations to the analysis of the various ancient paper materials represented in the collection of Central-Asian manuscripts which was formed by Dr. A. F. Rudolf Hoernle, C.I.E., under the orders of the Indian Government. Since publishing the important results of these labours in his exhaustive treatise *Microskopische Untersuchung alter Ost-Turkestanischer und anderer Asiatischer Papiere, nebst histologischen Beiträgen zur microskopischen Papieruntersuchung*" (Vienna, 1902),[2] Professor Wiesner has very kindly carried through an exact microscopical analysis of representative specimens of paper from the ancient MSS. and documents in Brāhmī, Chinese, and Tibetan writing, which my excavations at the Dandān-Uiliq and Endere ruins had brought to light. All these long-continued systematic researches, from the results of which Orientalist studies are bound to derive appreciable benefit in more than one direction, invest Professor Wiesner's verdict as to the antiquity of the paper of the Judæo-Persian document with exceptional authority. His opinion is recorded in the following report with which he has favoured me under the date of May 23rd, 1903:—

"Herr Dr. Stein hat an mich das Ersuchen gerichtet, ein mir übersendetes Papierfragmentchen (unbeschrieben cca 1 cm. gross), welches von einem vielleicht alten hebräischen Manuscripte herrührt, zu vergleichen:—

"(*a*) Mit den mir zur Untersuchung vorliegenden von Herrn Dr. Stein in Dandan-Uiliq selbst ausgegrabenen, spätestens dem viii. Jahrhundert angehörigen Papieren.

"(*b*) Mit modernen Papieren aus Khotan, welche mir Herr Dr. Stein zum Zwecke des Vergleiches in unzweifelhaften Originalen übersendet hat.

[1] See his treatise *Die Faiyûmer und Uschmûneiner Papiere* in *Mittheilungen aus der Sammlung des Papyrus Erzherzog Rainer*, vols. II, III, 1887.

[2] Published in vol. lxxii of the *Denkschriften der Mathematisch-naturwissenschaftlichen Classe der Kaiserlichen Akademie der Wissenschaften*, Vienna; also issued separately by Carl Gerold's Sohn, Vienna, 1902, pp. 50, 4to.

"Die Untersuchung ergab :—

"1. Die Papiere aus Dandan-Uiliq sind zum Theile mit Stärke geleimt, z. Th. ungeleimt.

"Das zur Untersuchung vorliegende Papier des hebräischen Manuscriptes ist ungeleimt, und insbesondere frei von Stärke und Stärkekleister.

"2. Das Papier des hebräischen Manuscriptes liess sich bei der mikroskopischen Untersuchung von den alten Papieren aus Dandan-Uiliq nicht unterscheiden.

"Jedoch konnte in diesem Papier nichts aufgefunden werden was auf die Gegenwart von Hadern (als Zusatz) mit Sicherheit hätte schliessen lassen. Doch ist mit Rücksicht auf die Kleinheit der zur Untersuchung vorgelegenen Probe nicht ausgeschlossen dass Hadernmasse (als Zusatz) im fraglichen Papiere vorkommt.

"3. Von den modernen Khotanpapieren, welche gänzlich oder doch zum grossen Theile aus macerirtem Bast des Papiermaulbeerbaumes bereitet wurde, ist das Papier des hebräischen Manuscriptes vollständig verschieden.

"Nach meinem Dafürhalten ist das mir zur Untersuchung übergebene Papier alt. Est ist entweder derselben Herkunft wie die übrigen in Dandan-Uiliq ausgegrabenen Manuscripte, oder es entstammt der alten arabischen Papierfabrikation aus der Zeit zwischen 751 n. Chr. (Beginn der arabischen Papierfabrikation) und 796 n. Chr. (aus diesem Jahre stammen die ältesten bis jetzt zur Untersuchung gelangten arabischen Papiere). Die arabische Papierfabrikation kann unmöglich mit jenen guten Produkten begonnen haben, wie solche aus der Zeit von 796 und später vorliegen. Zwischen 751 und 796 ist das arab. Papier auf viel tieferer Stufe gestanden, und es ist nicht unwahrscheinlich dass man damals Baste verschiedener Pflanzen durch Stampfen in Papiermasse verwandelte und als Zusatz stark zerstampfte Hadern benutzte.

"J. Wiesner."

Professor Wiesner's Report as above reproduced establishes two essential points beyond all dispute. It is certain on the

one hand that the paper of the Judæo-Persian document, when examined under the microscope, could not be distinguished by the most competent authority from the paper of the ancient manuscripts which had been excavated by myself at Dandān-Uiliq. On the other hand, its paper was found to differ utterly in structure and character from the modern paper produced and generally used at Khotan which, as shown elsewhere, has exclusively served as the material for the forged manuscripts and 'block prints' of Islām Ākhūn and his factory. The facts here established dispose of the possibility of the document being of modern origin, and distinctly point to the conclusion that the first or the second of the suppositions above indicated must be true, i.e. that the document was actually found among the ruins of Dandān-Uiliq.

In this connection I may mention that expert examination of the short Chinese inscription on the piece of stucco brought by the same men supports this conclusion. Dr. S. W. BUSHELL, C.M.G., the distinguished Sinologist, who has been kind enough to examine the few characters still clearly legible, has informed me that on palæographic grounds this short inscription might well belong to the T'ang period, from which all other remains of Dandān-Uiliq date.[1]

There still remains the question as to whether the document was picked up by the men in the alleged place and manner, or obtained in the course of my excavations at some other structure of the same site. Personally I am now strongly inclined to credit the men's story; for the strict supervision exercised over the labourers by myself, and my personal followers from India and Kashgar, would have rendered the abstraction of objects brought to light during my excavations distinctly difficult. But fortunately the question thus left open in no way affects the conclusion in which we must feel mainly concerned from the

[1] From the few legible characters Dr. Bushell has made out the words "The Disciple of Buddha," and a mention of *Avalokiteśvara*, pointing to a memorial of the dedication of an image of that deity.

philological and historical point of view, that as to the age of the document.

In my *Preliminary Report*, and more fully in my *Personal Narrative*, I have indicated the clear documentary and archæological evidence which proves that the settlement to which the extant ruins of Dandān-Uiliq belong, was abandoned to the desert-sands about the close of the eighth century of our era.[1] This fact furnishes a definite *terminus ad quem* for the Judæo-Persian document which has come to light from one or the other of its sand-buried structures.

The antiquarian finds and observations collected by me at the site do not supply evidence that would help to determine a chronological limit in the other direction. But I may mention that the earliest Chinese record from Dandān-Uiliq bears a date corresponding to 768 A.D. Considering the remarkable dryness of the atmosphere in the Khotan region as along the whole edge of the great Turkestan desert, there is nothing to preclude the possibility of a manuscript fragment remaining in fair preservation for a considerable number of years, even when not protected by the sand nor specially cared for. Hence the fact of Dandān-Uiliq having been abandoned only about the close of the eighth century A.D. could in no way be considered an argument against the conjectural dating which Professor Margoliouth is inclined to derive from an apparently historical allusion in the document.

The fragmentary state of the document leaves little hope of our ever obtaining light as to the incidents and conditions of life which brought the writer, a Persian-speaking Jew, to a distant settlement in, what was then as it is now, a province of the Chinese Empire. It is, indeed, a far cry from Khotan to Tabaristān, the ruler of which, the *Ispahbad*, is clearly referred to in the document. Yet, curiously enough, any doubts that might arise on this score are met in a very conclusive way by unequivocal evidence of Chinese historical records.

[1] See *Ruins of Khotan*, pp. 309 sqq., 315 sqq.; *Preliminary Report*, pp. 39 sq.

In his forthcoming great publication, *Documents sur les Tou-kiue (Turcs) occidentaux*, M. Ed. Chavannes has thrown open for Western research a remarkably rich storehouse of Chinese historical information about Central Asia.[1] Among the extracts from the Annals of the T'ang dynasty which M. Chavannes has translated and elucidated with rare critical acumen, and which his kindness enabled me to study in a proof-copy of his work, there are found brief but exact notices concerning the diplomatic relations which the rulers of Tabaristān maintained with China during part of the eighth century. Pressed hard by Muhammadan conquest, the rulers of Tabaristān naturally turned for help to the great though distant power which, as the successor of Turkish dominion, asserted its hold over Sogdiana and even on the Upper Oxus well up to the middle of the eighth century. Embassies from Tabaristān to the imperial Court are distinctly recorded as late as the years 746 and 754 A.D., about which time the Chinese lost Western Turkestān to the advancing Arabs. It is scarcely necessary to point out that by the side of such political relations a connection of commerce is also likely to have been maintained.

It deserves to be noted that, as I have already pointed out elsewhere, the influence of Persian art at Khotan is attested by unmistakeable traces in some of the most interesting of the Buddhist paintings which I unearthed from the ruined shrines of Dandān-Uiliq.[2] With political and cultural intercourse thus plainly indicated for that very period, we may well admit the possibility that the writer or recipient of the Judæo-Persian document so strangely preserved for us at Dandān-Uiliq, was himself connected with distant Tabaristān.

M. AUREL STEIN.

[1] M. Chavannes' work is being printed at St. Petersburg for the Imperial Russian Academy of Sciences. It is safe to predict that its publication, which may be expected at an early date, will be an important event for all scholars interested in the history and ancient geography of Central Asia. For the extracts concerning *T'o-pa-se-tan* or Tabaristān, see pp. 173 sq.

[2] See *Ruins of Khotan*, pp. xviii, 320.

The document of which a few lines are reproduced in facsimile, and the whole of which is printed, transliterated, and provisionally translated below, was discovered by Dr. STEIN in circumstances which have been recorded in his own words. The evidence obtained by different lines appears to point to this document being not later than the eighth century A.D., which would make it more than 200 years earlier than the oldest document in Judæo-Persian as yet known, viz., the Law Report of the year 1020, preserved in the Bodleian Library, and published by me in the *Jewish Quarterly Review* for 1899. But it would also be the earliest document in modern Persian of any sort, since the earliest manuscript of a prose work in ordinary Persian appears to be the Vienna copy (dated 1055 A.D.) of the treatise by Muwaffaḳ Ibn 'Ali of Herāt, composed between 961 and 976 A.D., and the earliest specimen of a Persian poem ostensibly bears the date 808 A.D., but has been shown by convincing grounds to be centuries later.[1]

It seems, however, that this document does not belong to the end of the eighth century, but to the beginning. For in line 23 there occurs a sentence "since Yazid sent a . . . . to the Ispahbud," and something more is told us of the Ispahbud, of which however, owing to the loss of words, the sense is not quite clear. Now the Ispahbud was the prince of Tabaristan, and in spite of Moslem conquests the title was retained in that region for many centuries: a prince who bore this title is mentioned by Ya'kubi (ob. circ. 912; *Bibl. Geogr. Arab.*, vii, 276), and also by an author of the seventh century (Schefer, *Chrest. Persane*, ii, 99). When therefore the letter mentions communications between Yazid and the Ispahbud, it is natural to suppose the reference to be to those of *Yazid son*

[1] Pizzi: *Storia della poesia Persiana* (1899), i, 66.

of Al-Muhallab son of Abu Ṣufrah, who conquered parts of Tabaristan in the days of Sulayman son of Abd al-Malik, about 99 A.H. or 717 A.D. The history of his exploits is told by Baladhuri, pp. 335–339; Ṭabari, ii, 1320, etc.; Yāḳūt, s.v. *Ṭabaristān*; Ibn Khillikan, s.v. *Yazīd*: and correspondence between Yazid and the Ispahbud is mentioned by these authorities (e.g. Ṭabari, p. 1324). Now this Yazid was imprisoned by Omar son of Abd al-'Aziz, who reigned from 99 to 101 A.H., and died about 102 A.H. His message to the Ispahbud cannot have been later than 99 A.H., or 717 A.D. And the context of the Judæo-Persian document (so far as it is intelligible) implies that the writer is describing an event, not of the distant past, but of the immediate past. Hence (if this identification be correct) the date of our letter will be about 100 A.H. or 718 A.D.

What did Yazid send to the Ispahbud? For a long time I thought that of the two words which represent this object the second was נאמא 'a letter.' This reading, however, was improbable, since elsewhere the writer spells the word נאמה, and is not likely to have varied. Moreover, the first two letters do not resemble נא. With the aid of the magnifying-glass the word is shown to be תסמא, and the word before it ותן. The word תסמא is evidently to be identified with the Persian تسمه 'a strap,' and the word ותן must be connected with وت or وات, which means 'made of leather' (*pelle vel corio confectum*). It is clear that the interpretation of each of those words confirms that of the other. Yazid sent a *leather strap* to the Ispahbud—probably a symbolic present, signifying personal chastisement, if submission were not made.

That Persian (in the ordinary sense of the word) was at this time a commonly used vernacular is quite certain, though there may have been no books written in it. But that would not prevent it from being a vehicle for correspondence. Arabic writers frequently put Persian sentences into the mouths of persons of the first century. Makḥul (ob. 112 A.H.) is thus quoted by Tirmidhi (ob. A.H. 279; Jami', Lucknow ed., p. 12) as saying *nadānam* for 'I do not

know.' Jāḥiẓ, or a not much later writer confused with him, quotes from Anushirwan (ob. 577 A.D.) a Persian sentence (*Maḥāsin*, ed. Vloten, 169) occurring in a work bearing the Arabic name *Tawḳī'āt*. Some early verses in which Persian is mixed with Arabic are given by Jāḥiẓ in his *Bayān* (i, 61). There is therefore nothing surprising about one Jew corresponding with another in Persian about the year 718 A.D.; we should indeed expect the Persian of that period to be practically free from Arabic words, and this expectation is justified, since in the fragments of 32 lines which we can read, besides the proper name Yazid there is only one word which is Arabic, viz. רקיבא, which in the context where it occurs certainly means *stirrups*, and is therefore the Arabic ركاب, which in Persian is written ركيب; and the double misspelling is probably evidence of early borrowing—perhaps through Aramaic. Since these 32 lines are all fragmentary, we cannot indeed be sure that no other Arabic words occurred in the document when it was intact; but the chances are greatly against their occurrence, since in documents dating from the time when Persian was commonly written, when the authors do not purposely avoid them, Arabic words occur too frequently to admit the possibility of their exclusion to the extent which this document displays. The treatise of about 990 A.D. which Schefer puts at the commencement of his *Chrestomathie* gives evidence of this statement; and the Jewish Persian of all periods is no less full of Arabic than the Mohammedan. Hence their absence from this document seems both to agree with the above identification and to confirm it. Bacher has with justice called attention to the further absence of *Hebrew* words, a sprinkling of which we should expect in a communication from one Jew to another; but, save for the word *Rabbi*, there is no such sprinkling: and most surprising is the designation of the Deity by the Persian names *Ized*, *Khudā*, instead of by one of the familiar abbreviations or periphrases to be found in ordinary books. Perhaps the writer of the letter was a sectarian.

Too much is lost for the editor to endeavour to make out

a continuous sense. In lines 25 and 26 some one seems to be describing a prescription (magical or otherwise) which a handmaiden is to be taught: perhaps the writer had been employed as physician or magician by the Ispahbud, who explains how easily the charm can be wrought. The greater part of the letter is occupied with some details about the sale of sheep, in which the writer appears to be complaining of unfair treatment. He is evidently writing to some one who is superior to himself, and who in the writer's opinion is able to do him some commercial or pecuniary service owing to his 'new rank' (if those words are rightly interpreted). That new rank was probably that of purveyor to the Ispahbud, or at any rate administrator of some branch of business at his court. The writer of the document was a merchant of sheep, and complains that worthless animals had been bought, in consequence of which a number of sheep had been left on his hands: these he requests the government purveyor to buy.

Apparently he had also been compelled to sell some other property, but the nature of his complaint can scarcely be guessed. The name of a city was mentioned, but the part of the leaf bearing it has been lost.

Further evidence for the antiquity of the document is furnished by Dr. Stein's account of its discovery and by Professor Wiesner's report on the paper, which both give the *end of the eighth century* as a *terminus ad quem* for the document.

Mr. A. E. Cowley, sub-librarian of the Bodleian Library and Fellow of Magdalen College, has made the following observations on the palæography, which give the same kind of date:—

"Some of the characters are ordinary and give no indication of age.

The most interesting are: א, ג, ה, ז, ל, נ, פ, צ, ק.

Of these א, ה, and to some extent ל, פ, ק bear a slight resemblance to characters used (according to Lidzbarski) in Babylonia and Persia in the twelfth century.

The date of the document cannot be so late as that. The writing is throughout more archaic than that of the Persian deed of 1021. Some letters approach more nearly to forms in pre-Christian papyrus and inscriptions, as א, ג, ה (inscription form), ק, and less closely פ, צ.

The א seems to be half-way between the Egyptian-Aramaic (papyrus) form (𐡀 א) and the later N. It is sometimes less developed than the א on the Nash papyrus.

The ג is almost identical with the Eg.-Ar. ∩, and identical with the form on a papyrus (sixth century) in the Bodleian.

The closed ה is the form found in inscriptions of the first to third centuries, and hardly distinguishable from ח, which does not occur. It is later than the form in the Nash papyrus.

The מ is also later than that of the Nash papyrus.

The פ, with its tail sometimes nearly straight, is very archaic, and approaches the forms used before final and initial letters were differentiated.

The צ is unusually large and clumsy. It is nearer to the form used in inscriptions (fourth to fifth century B.C.) 𐤑 than to the later צ.

The ק has a small head and is like the Eg.-Ar. form ꟼ or ק, but its long tail is later.

Taking the character of the writing generally, there seems no reason to doubt, and much reason to believe, that it dates from about the eighth century. If it were on anything but paper it might be even a little earlier. It stands midway between the eleventh century Persian deed and the remains of the third and fourth centuries."

TEXT AND TRANSLITERATION.[1]

(1) יזיד כודה אי יאר באשד זוד רוזא
ایزد خدائی یار باشد زود روز

(2) דה וביסת נאמה ביש קרדום ביש
ده وبیست ناحه بیش کردم بیش

(3) ר קו צאמק אי מן פא צי רסד ופא דות
کی جامگی من با چه رسد وپادست

(4) רסד יש בי פרמי דאדון אני מרא ב
رسدش به فرمای دادن انی مرا

(5) ובריז כרי תא מן אבר כסתומי פרוד אמדומי
وبرین خری تا من ابر خستمی فرود امدمی

(6) ן אי כוש תורא יזיד כודה פדיש מוזד אי
زیا]ن خویش تورا ایزد خدا بدش مزدی [دهاد

(7) דור בי ופתאד תא מה מי מה ותא דה מי
دور بیفتاد تا مه می مه وتا ده می

(8) ספנד בי בוד ומוסתה כרנד יזיד כודה סכת
گو]سپند بی بود وسسته خرند ایزد خدا سخت

(9) מבאד צי כם אז ישאן תכאור מא בוד צון ישיאן
مباد چه کس ازیشان تکاور ما بود چون ایشان

[1] A considerable amount is lost at *both ends* of the lines.

(10) צמה אי פרוכתה בודאם אין פא רוי ימא אב
جامهٔ فروخته بودَم این با روی ما ابْ[ردند

(11) רוכתה בוד קם נא בוד מרדומאן אי שהר פר
فْ[روخته بود کس نبود مردمونِ شهر

(12) סיה פתקן אי כראם וציז בד נא פידה הסת
سه بتکوئی خرم وچیز بد نه پیدا هست

(13) צון אני מן פא תו ומיד דארום יקי קא
چون انی من با تو امید دارم یکی کا[ر]

(14) סוד וזיאן אי מן בי שנאכתן ונו שבילי
سود وزیانِ من بشناختن ونو شپیلی

(15) ש גוספנד אז סויאי מנרא כרידן תא
ش[ش گوسپند از سوئ منرا خریدن تا

(16) אידון גופתי קו סיה
ایدون گفتی که سه

(17) וסכת זיאן ומנד הם
وسخت زیانمند هس[ت

(18) ורא אז סוי אי מן יז תר
ت]ورا از سوئ من یاز

(19) קו כוד כרידי וכוד פרוכתי וכוד רכ
که خود خریدی وخود فروختی وخود

(20) אגר מן רא סוד בכת באיסתי בודן מן
اگر من را سود بخت بایستی بودن من

(21) בי תו אז שמר כוש ציז אנדוה מא פד
بی تو از شمر خوش چیزانده ما پد[یر

(22) יסתידי יני אידר בוד וסוי גוספנד ידון דרוס[ת
[فر] ستیدی این ایدر بود وسوی گوسپند ایدون درس[ت

(23) תו רסד צון יזיד פרסתד ותן תסמא נזדיק סבאבד
تو رسد چون یرید خرستاد وتن تسما نزدیک سپابد

(24) מרא סבאבד ידון קופתד קו מרא צמכוי יכי
مرا سپابد ایدون گفت که مرا چمخوئ یکی

(25) צמכוי ארי מן קניזק רא אמווום וצנד ציסת
چمخوي آری من کنیزک را آموزم وچند چیست

(26) בה בינדום נא ביגדארם בי אב גורבק יקי
به بیندم نه بگذارم بیاب گربک یکی

(27) דהום תא בגידי רא וא אמווד אנדריק אי סי
دهم تا بگیدی را نه آموزد اندر یکی س[ه

(28) קו נאמה ישמא יפתום בי יקי ביה אז אן גופתיד
که نامهٔ شما یافتم به یکی به از ان گفتید

(29) קאר אי פרמודי סכת קונום תא קר דה בוד
کاری فرمودی سخت کنم تا کرده بود

(30) [ה]ושום ציז אנדוה מא כור צי הושום רא כוסתה בוד
هوشم چیز انده مخور چی هوشم را خسته بود

(31) אז סו [פ]ושת רופתה פורסידום ידון קופת
از سوی پشت رفته پرسیدم ایدون گفت

(32) צא פרואן יכוד אז אן סוי כואסתאדן פרמי

جا پروانِ خود از ان سوی خواستادن فرمای

(33) אגר נאמה ישמא פריסתידי קרדא

اگر نامهٔ شما فرستادی کردہ

(34) פיציהאי אן פשיז אין גוספנד

پیچهٔ ان پیس از این گوسپند

(35) בירון נאמדה אז סוי

بیرون نآمدہ از سوی

(36) נמוד אז זין ורקיבא ודואל

نمود از زین ورکیبا ودوال

(37) אז הר צי היז אי בדין אן

از هر چه

Translation.

(1) *If* the Lord God help, quickly on the day
(2) ten and twenty letters I wrote to no purpose without
(3) Saying "What has become of my stipend, and into the hand *of whom*
(4) *if* convenient, command him to give it to me.
(5) and buy with that" till I rose up and fell down
(6) to your own *hurt*, may the Lord God *give* you a reward therefor.
(7) it got delayed, from month to month (?) and from decad to decad (?)
(8) that they should buy worthless and lean sheep. The Lord God *give them* very

(9) God forefend that one of them should be our messenger (?) since they
(10) *when* I had sold a garment, they *cast* it in my face
(11) had sold: there was no-one of the men of the city PD
(12) that I should buy three *petku*: and no mischief came of it.
(13) since I expect this of you: first the affair
(14) to be acquainted with my profit and loss, and your new post
(15) to buy the six sheep of me, in order that
(16) you said thus: Rabbi, three
(17) and it is very detrimental
(18) try and it from me
(19) you yourself bought, and you yourself sold, and you yourself
(20) if I am to be successful
(21) to you. Be in no way distressed on your own account
(22) nor (?) was it here. And in reference to the sheep it was right
(23) came. When Yazid sent a leather strap to the Ispahbud
(24) the Ispahbud said: *bring* me a tray (?)
(25) the tray. See, I will teach the girl. And as many things as
(26) I have seen, I will not transgress. Take a *gurbak*
(27) I will give, that she may not learn (?) . To each one three
(28) that I received your letter, one better than that you said
(29) had you ordered anything, I would work hard that it might be done
(30) my feelings, do not trouble at all if my feelings be hurt.
(31) going behind, I asked: he said thus
(32) command that your minister (?) be interrogated concerning that
(33) if you had sent your letter *it would have been* done
(34) its young before these sheep
(35) it did not come out from the direction of
(36) he showed, such as saddle, stirrups, and a hide
(37) of everything that

Notes.

1. יזיד כודהי. This formula occurs again in line 6 and line 8; יזיד by itself in line 23. In the last place چون یزید فرستاد . . . نزدیک سپاید 'when Yazid sent . . . to the Governor,' it certainly is the Arabic proper name Yazid. But in the first three places it is followed by the word כודה, which can only be the Persian خدا 'God.' And, indeed, the context in the first two lines is in favour of the meaning 'God.' '[If] the Lord God befriend' is like a line ap. Vullers, i, 194 بخت پاینده خدا یار وسعادت باقی; and 'May the Lord God [give] the reward' is too common to need illustration. The third passage is too obscure to serve as an argument.

The words זור רוד resemble אורדור occurring in the Law Report in the sense 'day.'

2. ביש קרדום. Compare بیشکار, ap. Vullers.

3. צאמק אי. In line 10 we read of a צמה being sold. The Jewish dialect confuses چ and ج, e.g. in the Law Report צימלא stands for جمله.

ופא רות 'perhaps into the hand of.' Bacher suggests that this is the compound پادست 'goods taken on credit.'

4. אני for آن. A Turkish idiom? Cf. line 13.

5. The writer is evidently clear that the perfect should have a *u* in the first person.

6. כוש seems to be خویش, ordinarily pronounced *khīsh*.

7. דור בי ופתאד. It is noticeable that the writer makes no difficulty about beginning words with vowels: cf. line 13, ומיד.

תא מה מי מה. These words should mean 'from month to month'; but the identification of the intermediate preposition מי is not easy. Probably we should supply at the end ותא דה מי דה.

12. פתקוי. This seems to mean some sort of animal.

14. בי שנאכתן. In certain Persian dialects ب is regularly prefixed to the infinitive.

נושבילי. The interpretation of this is very doubtful.

15. The combination סוי אי appears to be the Persian سو followed by the *yā* of *izāfet*.

24. קופתר, doubtless an error. צמכוי perhaps for جام خاو.

25. גורבק perhaps for گربه 'a cat'; yet a herb of some sort seems more likely. Vullers says, *res felis capiti similis e salice proveniens.*

The chief archaism in the document appears to be the separation of the *yā* of *izāfet* in the form of אי, the use of which, however, appears to be rather irregular; it is identical in form with the indefinite article, and apparently יקי (lines 13, 26, 28) and יק אי (line 27) can be written indifferently. The double spelling of the word گفتن with ג and ק seems to point to the writer being either a foreigner or unpractised in writing: it even suggests suspicion of transliteration from Arabic writing.

Professor Bacher, of Buda-Pest, has had the goodness to contribute the following notes.

Zur Lesung.

Z. 5. Viel. אורדומי (st. אמרומי).

Z. 14. Das vorletzte Wort scheint תן zu sein; vielleicht aber וש (der mittlere Strich des ש zu ergänzen).

Z. 15. Nach גוספנד folgt die Wortgruppe אז סוי אי מנרא; vgl. Z. 18.

Z. „ Der Wortrest vor גוספכד kann אין sein.

Z. 16. Das letzte Wort סיה ist سِه, drei. Das vorletzte Wort kann בדו sein (بدو).

Z. 18. אז סוי אי מן יא תו[ורא].

Z. 23. Das vor נאמה stehende Wort ist ורק (der obere Schenkel des ר gekürzt und mit dem ק verbunden), also dasselbe arabische Wort, das Z. 36 (ורקי) steht. Dabei ist ורק das arabische Aequivalent des pers. نامهٔ (etwa 'Briefblatt').

Z. 27. Das erste lesbare Wort ist דהום (= دِهَم oder دَهُم).

Z. „ Am Schluss der Zeile: [ ]אז דריק אי ס = از دریغ س ob moerorem . . .

Z. 29. Das Wort nach פרמודי kann אנדא]כת[(= انداخت) gelesen werden.

Z. 31. Die erste Wortgruppe: אז סוי אי ה]ושת[(= از سوي هُوشَت).

Z. 35. Nach נאמדה ist noch אי erkennbar.

Zur Erklärung.

Z. 1. Dass יזיד, welches Wort hier und auch Z. 6 und 8 mit כודה (= خُدا) zusammen steht, wirklich s.v. ist wie איזד (ایزِد), scheint mir nicht ausgemacht zu sein. In Z. 23 steht יזיד allein in dem ganz verständlichen Satze: چون یزید فرستد ورق نامهٔ نزدیکٔ سپاید ("wenn Yazid einen Brief an den Befehlshaber schickt"). Hier kann doch wohl nicht Gott gemeint sein; sondern יזיד ist Eigenname. כודה אי יאר in Z. 1 kann ein Adj. comp. sein wie خُداور, خدایگان, also خُدایار.

Z. 3. פא דסת = פא דות ist viell. پادست Kauf auf Credit (Vullers, i, 315*a*).

Z. 20. "Wenn mir der Nutzen gelingen sollte."

Z. 23. Zu סבאבד = اسپهبد, اسبهبد ist zu erwägen, was bei Vullers, i, 92*a*, angeführt wird: "spec. nomen regibus Tabaristânae proprium, qui primum satrapae Sassanidarum erant, deinde autem principatum sibi vindicarunt." Das gäbe dem Document einen geogr. und hist. Hintergrund.

Z. 30. הוש kann هوش, "mors, interitus" sein (Vullers, ii, 1486*a*, *b*). הושום רא כוסתה = هوشم را خواستة.

Z. 34. פשין kann nicht = פיש אז sein. پشيز ist eine kleine Münze.

Zur Transcription.

Merkwürdig ist die consequente Schreibung von ק für ک (= כ). Auch פ für ب (= P.). פא = با Z. 10 weist auf härtere Aussprache hin.

Auffallend ist קופתד (Z. 24) für کُفتد; ebenso קופתי (Z. 31) für کُفتی, neben גופתי, Z. 16, und גופתיד, Z. 28. Sonst findet sich ק für غ s. Z.D.M.G., li, 400; lvi, 759; auch in unseren Texte, Z. 27, דריק = دريغ.

פידה (Z. 12) = پيدا; vgl. כודה = خُدا.

Zur Grammatik.

Besonders charakteristisch ist das Überwucheren des *u*-Lautes. Z. 2, קרדום = كردم; Z. 30, הושום = هوشم und oft. Es ist das eine hauptsächliche Eigenthümlichkeit des Jüdisch-Persischen; cf. Z.A.T.W., xvi, 236; Z.D.M.G., li, 407.—Hervorzuheben, Z. 20, בינדום (בינדום) = ديدم.

Merkwürdig ist das Fehlen jeglichen hebräischen Sprachelementes.

JUDAEO-PERSIAN DOCUMENT IN STEIN COLLECTION.

Art. XXVII.—*Early Documents in the Persian Language.*

By D. S. Margoliouth.

I. *Persian Deed for the Sale of Land, discovered by Dr. Hoernlé.*

This document is described by Dr. Hoernlé in a Report on the British Collection of Antiquities from Central Asia, reprinted from the *Journal of the Asiatic Society of Bengal*, vol. lxx, pt. i, extra No. 1, p. 27. On the discovery of these documents Dr. Hoernlé's *Note on the British Collection of Central Asian Antiquities*, Oxford, 1899, should be consulted. The Persian leaf is now in the British Museum. There is with it another of about the same period, but almost illegible. They formed crumbled up lumps of waste paper, and required very careful unfolding and smoothing out.

The facsimile shows a date given in line 11, for the reading of the words *ta'rīkh* and *sāl* (date and year) admits of no doubt. Nor, indeed, does any doubt attach to the reading of the words "and one from the Flight of the Prophet, on whom be peace"; but the signs before 'and one' are not very clear. Words they must be, since 'and one' is in words; otherwise one might be inclined to imagine them to be some sort of *siyāḳ* numeral. Two authorities whom I have consulted agree with me that the words most probably stand for 'four hundred,' and we are probably safe in reading the date "four hundred and one from the Hijrah." This corresponds with 1010–1011 A.D. The places mentioned, "the river Kala-Asppa" and "the village Almayah (?) in Nikotanj (?)," do not at present admit of identification; since all this country was buried in sand, these names probably perished with the places to which they belonged.

For the source of the document is the Takla-makan desert, of which Sven Hedin has given a powerful description in his book *Through Asia*, pp. 788–805.

It is clear from the signatures that the people of this region had only just adopted Islam, since, though their own names are Moslem, the names of their fathers are barbarous. This fact is felicitously harmonized with the date 401 by Dr. Hoernlé: "The date of the document refers it to the reign of the great Yilik Khan, *alias* Sultan Satuk Bughra Khan, who is said to have lived H. 333–429 (A.D. 944–1037) to the age of 96 years. He was the founder of a very extensive but short-lived Uigur kingdom, with its capital at Kashgar. In his time the first permanent introduction of Islam into Eastern Turkestan took place. Tradition says that his father, Tangri Kadir Bughra Khan, was still an idolater; so was his uncle and immediate predecessor, Harun Bughra Khan. He himself is said to have adopted Islam when he was 12 years old, and to have been the first convert to Muhammadanism in Eastern Turkestan." [1] Of the fathers' names one, *Shirgu*, with a slight difference of spelling, is familiar in Arabic records; another, Likokongo (Mr. Platts would read Liko-kuhi), is unfamiliar. A third (*Ḳiligh*) resembles the familiar Turkish name *Ḳilij*, 'sword,' but I am not clear that the two can be identified. Ḳiligh and Shirgu further style themselves by a word which I formerly read *Sipāsi*, the name of a sect, real or fictitious, of which a lengthy account is given in the *Dabistan* (translated by Shea & Troyer, Paris, 1843, vol. i, ch. i, sec. 2). It would, however, be rather strange for the Moslem sons to mention in their signatures that their fathers had been of a different religion; and since the Sipasis, if the *Dabistan* is to be believed, were Zoroastrians, we should not expect Turks to be of this religion. Hence I am now inclined to read the word *Subashi*, and identify it with a name which occurs in the chronicles of this period: a Subashi Takin was the head of the army of Ilk Khan

[1] See T. D. Forsyth, *Report on a Mission to Yarkund*, 1873, p. 122 sqq.

(Ibn Athir, ix, 111), and a Subashi was the chamberlain of Mas'ud of Ghazna (ibid., 311; Kazimirski, *Minoutchehri*, p. 111). The word (spelt according to Osmanli orthography Ṣubashi) is familiar in Turkish history, and means an official subordinate to a Sanjak; Pavet de Courteille renders it (for Eastern Turkish) *commissaire de police*; Redhouse says "a police-magistrate under the Timariot system"; further notices of them are to be found in Zinkeisen, *Geschichte des Osmanischen Reichs*, iii, 129. In the Turkish-Turkish dictionary of Sami, dated Constantinople, 1318 A.H., the constable is said to have been called 'Water-head,' because the Bedouins were always quarrelling about water, and therefore when a district had to be put in order the first business which required permanent settling was the water supply: such persons would also be naturally employed as witnesses. I fear that, like *chawushes* whom I have myself met, they were unable to sign their names: the names are signed by the scribe who wrote the deed, and they made their marks as do the illiterate in this country. It may be doubted whether the scribe wrote their names with the necessary accuracy.

Owing to the difficulty of identifying the places the interest of this deed is moderate. Does Nikotanj (?) stand for Khotan?—early forms of which word, it must be confessed, bear no resemblance to this variety. On the other hand, the precautions taken by the purchaser are noteworthy. Seven witnesses, four of them magistrates, attest the purchase of the property. Four boundaries are described, and the owners of the adjoining lands are stated to be orthodox Moslems. The vendor, though the purchaser is connected with him by marriage, cannot sufficiently asseverate that neither he nor his blood relations can make any further claim to the property.

بسم الله الرحمن [الرحتم

(1) این خطست کی نبشته می آمد بدستی مصلح مردمان

(2) حسین بن لیکوکونفی خال من درسن چل پی خود

(3) المایه روستای در نکوسح جز از تخم زمین

(4) یحیی بن ایوب را فروختم بهای تمام یافتم زمین به

(5) ودست تاویز من که آن زمینی کوتاه شد از ملک من

(6) زمین فروشنده حد دوم جوی کلا اسبا حد سیو[م

(7) محمد واحمد ایـن جهار حـد بیـع مسلمانان به درستی شریعت اند

(8) بیرون کردم از امد فریاد ملک یحیی

(9) خصومت کند ان همه زورِ فساد وبهتان ونا حلالیست و

(10) بیرون آمد و از ملک خویشاندان من بیرون آمد و از عرض

(11) حجت باشد تاریخ سال جهار صد ویک از هجرة النبی علیه [السلام

(12) شهد بدلک زکریا بـن لیکوکنعی

شهد بدلک حسین بن لیکوکنعی

شهد بذلک یعقوب بن شرکوا سباشی

شهد بذلک عمر بن قیلغ سبا[شی

شهد بذلک محمد بن قیلغ سباشی

TRANSLATION.

(1) This is the document that was written by the hand of the agent

(2) Husain, son of Liko-kongo, my maternal uncle, in the year 40 (of his age ?)

(3) Almayah (?), a village in Nikotanj (?), part of the boundary of the land of

(4) To Yahya Ibn Ayyub I sold: I received the full price; the land at

(5) And my hand . . . that land was taken out of my property; *and its boundaries are first the property of*

(6) The seller of the land: second boundary the stream Kala Asppa: third boundary . . . : *and fourth boundary the estate of*
(7) Mohammed and Ahmad. These four boundaries are the property of orthodox Muslims.
(8) I have removed from the possibility of complaint (?) the property of Yahya : *and if anyone*
(9) Litigate, his case is all falsehood, error, fiction, and wrong.
(10) It went out: and from the possession of my relations it went out: and from the property
(11) May be evidence. Dated the year 401 from the Flight of the Prophet, on whom be *peace.*
(12) Witnessed by—

Zachariyah, son of Licocongo.
Hasan, son of Licocongo.
Jacob, son of Shirkū, Subashi.
Omar, son of Kiligh, Subashi.
——— son of Kiligh, Subashi.
Mahmud, son of Kiligh, Subashi.
——— son of Shirkū.

II. *Persian Verses in the Syriac Character, discovered by Mr. Conybeare.*

That the Persian Christians, of whose sufferings the Acts of the Martyrs tell us so much, had some literature in the language of their country, seems likely, and, indeed, a version of the Bible in Persian is mentioned by both Jewish and Christian authorities of pre-Mohammedan times. Mr. F. C. Conybeare has observed that a letter of the sixth century addressed by the Armenians to the Persian Christians was in Persian as well as Armenian; գրեցաք Հայկերէն և պարսկերէն "we have written in Armenian and Persian" are the words with which the writers describe the language

of their letter.[1] He was also fortunate enough to discover in a Nestorian Ritual (Gazza No. 1 of the Library of the Propaganda, Piazza di Spagna) some fragments of a Persian hymn, written in the Syriac character. They are on p. 233; Dean Maclean describes them thus:—

"The Persian lines are inserted close to one another in four stanzas of an Epiphany 'Canon,' where they are obviously out of place and intruded. The first three Persian stanzas are intruded into three consecutive Syriac stanzas, then follows an uninterpolated Syriac stanza, then the fourth Persian stanza is interpolated in the next Syriac stanza. They only spoil the sense of the Syriac, and it is hard to say why they have been interpolated in that particular place . . . . I should conjecture that some scribe, who knew the Persian lines well and wished to preserve them, interpolated them not very skilfully into this Canon."

The MS. is said to belong to the thirteenth century.

Persian is practically unknown to the Nestorians of Persia of our time: they speak (besides their own vernacular) Turkish or Kurdish; and there is a ritual which I have seen at Urmi in which Turkish is mixed with Syriac, somewhat as Persian is mixed with it here. The Syriac verses in this passage show Mohammedan influence, since they rhyme in a definite consonant; the date of the Persian verses is harder to settle, since the history of rhyme and versification in Persian is obscure. But they contain no word that can be termed Arabic except *dīnā*, 'religion'; and the questions connected with that word are too difficult to permit of our basing much on its occurrence.

Dean Maclean's description proceeds: "The Canon is Deut. xxxii, 21ᵇ–43, each two (Syriac) clauses of which are 'farced' with a Syriac stanza. The interpolated stanzas are as follows":—

Deut. xxxii, 40: Mix, O Lord, our Hallelujahs with the Hallelujahs of the angels, and our hymns with their hymns, and our songs with their songs.

(First Persian passage.)

[1] Գիրք Խղթոց, Tiflis, 1901, p. 47.

Deut. xxxii; 41[b] : *And my hand shall take hold on judgment, and I will render vengeance :*

May Thy will, O Lord, be pleased with the service of Thy worshippers, and may our prayers be received before the throne of Thy majesty.

(Second Persian passage.)

Deut. xxxii[a], 42[a] : *I will make my arrows wet.*

ܛܝܒܘܬܟ ܥܠܝܢ ܐܫܦܥ.
ܐܝܢ ܡܪܝ ܘܨܠܘܬܟ ܫܡܥ.
ܘܚܣܐ ܠܪܐܣܟܠ ܘܐܪܫܥ.
ܫܒܥܝܢ ܙܒܢܝܢ ܫܒܥ ܫܒܥ.

(Syriac) Pour out thy grace upon us,
Yea, Lord, and hear our prayer,
And be gracious to him that has sinned and done evil
Seventy times seven seven.

(Third Persian passage.)

Deut. xxxii, 42[b] : *And my sword shall devour of the blood of the slain.* Syriac stanza rhyming in N.

Deut. xxxii, 42[d] : *From the head of the crown of the enemy : therefore, ye nations.*

ܠܘ ܥܡܡܐ ܙܡܪܘ ܫܘܒܚܐ.
ܘܠܘܕܝܬܐ ܒܝܕ ܕܒܚܐ.
ܒܗܢܐ ܥܐܕܐ ܫܒܝܚܐ.
ܕܥܡܕܗ ܕܡܫܝܚܐ.

Come, ye peoples, sound a hymn,
and thanksgiving by sacrifice (?)
in this glorious feast
of the Baptism of Christ.

(Fourth Persian passage.)

The Persian verses are as follows: they are printed from a copy of Mr. Conybeare's photographs made by Dean Maclean, collated by J. P. Margoliouth and myself.

(1) p. 233*a*.

ܒܗܪ ܣܘܐ ܢܝܓܗ ܟܝ ܕܡ .
ܕܝܕܡܕܝ ܐܣܬܘܪܐ . ܒܝܘܣܬܐ
ܒܬܪܣܝܝ . ܕܝܢܐ ܒܪ ܡܫܝܚܐ ܪܗ .

(2) p. 233*a*.

ܡܪܘܪܝ ܡܐܟܪܝ . ܡܒܪܘܫܝ
ܐܟܝ ܟܘܢܝ . ܪܗܐ ܪܣܬ ܒܐܓܪܝ .
ܕܝܢܐ ܒܪ ܡܫܝܚܐ ܪܗ .

(3) p. 233*b*.

ܡܫܝܚܐ ܪܗ ܕܘܣܬܐ ܪܡ . ܪܘܣ
ܡܓܘܐ ܢܝܓܗ ܕܪܡ . ܐܪܘܐ ܐܢܕܘܝܝ
ܒܐܪܡ . ܕܝܢܐ ܒܪ ܡܫܝܚܐ ܪܗ .

(4) p. 233*b*.

ܒܫܡ ܐܒܐ ܘܒܪܝܐ . ܘܪܘܚܩܘܕܫܐ
ܥܡܕܝܢ . ܠܘ ܒܪܫ ܠܪܘܫܐܝܝ .
ܘܠܘ ܒܡܐ ܒܟܫܐܝܝ .

(1) May be transliterated:

بهر سوی نگاه کردم دیدم که استواری پیوسته بترسائ دین پاک مشیحا را

I looked to every side: I saw that security is bound up with Christianity. The pure religion is Christ's.

The spelling استوارا and دینا for استواری and دینِ may be dialectic. The alteration دیدم که for دیدم دی is very slight.

(2)

می خوری می خری می فروشی زبان کنی راهِ راست بگیری
دین پاک مشیحا را

Thou eatest, thou buyest, thou sellest, thou revilest, thou takest [*not* ?] *the right way. The pure religion is Christ's.*

Here, again, راهِ راست is spelt راها راست.

(3)

مشیحا را دوستارم
زکس مگو نگاه دارم
از کو اندوه باز آرم
دین پاک مشیحا را

I am the friend of Christ. Bid me fear no-one. I remove trouble from the road. The pure religion is Christ's.

The spelling *anduh* is noteworthy. The second line is not perfectly clear: ⟨illegible⟩. I think, however, the emendation ⟨illegible⟩ = ازکس is fairly certain. With the مگو نگاه دارم we may compare the familiar use of گو as a periphrasis for the imperative of the third person.

(4) The Persian begins—

⟨illegible⟩ ای
⟨illegible⟩ عماده ئی
تو قدش ترسائی
وتو بما بخشائی

Thou art baptized in the name of the Father and the Son and the Holy Ghost:

Thou art holy, a Christian:
And thou dost bestow on us.

The sense of this last stanza is obscure, because it is not clear whether it is addressed to the baptized Saviour or to the baptized Christian.

If this be a fragment of pre-Mohammedan hymnody, its value for the history of the Persian language is great. In any case, I think we are justified in supposing that the name for Christian ترسا 'fearing' is pre-Mohammedan, and that the Arabic راهب, often used for *monk*, but sometimes signifying Christian merely, is a translation of it. ترسا, in its turn, is probably a translation of the Greek εὐσεβής.

The mixture of Syriac with Persian in the last stanza is curious.

Is the Persian rhyme, as it appears in these verses, borrowed from Arabic versification or from Christian versification, such as appears in Latin? If the lines belong to the early Persian Church, the second explanation must be true.

PERSIAN CONTRACT FOR SALE OF LAND.

ART. XXVIII.—*The words 'Ḥanīf' and 'Muslim.'* By SIR CHARLES J. LYALL, K.C.S.I., V.P.R.A.S.

IN the issue of this Journal for July, 1903 (pp. 467–493), Professor D. S. Margoliouth propounds a theory in explanation of the words *Muslim* and *Ḥanīf*, used in the Ḳur'ān, which is thus stated:—

"The suggestion, then, which I should offer for the explanation of these terms is that some twenty years before Mohammed's mission some sort of natural monotheism was preached by Musaylimah, whose followers being called *Muslims* [after the preacher's name] and *Ḥanīfs* [from the tribe of Ḥanīfah to which he belonged], these words were supposed to signify *monotheist*, and as such were adopted by Mohammed, who, owing to the comparative obscurity of Musaylimah, had at least at first no knowledge of their origin, and afterwards felt bound to assert positively that they were both in use in Abraham's time."

When the paper setting forth this theory was read before this Society in February last, it appeared to me that the suggestion was, on historical and etymological grounds, scarcely tenable; and a careful perusal of the paper in print, in spite of the erudition and wealth of illustration with which its ideas are supported, has not led me to change this opinion.

If we consider the question historically, the hypothesis demands that Musailimah's teaching should, for a considerable time before the appearance of Muḥammad, have attained such a celebrity and extension in the Arabian Peninsula that, although the tribe to which he belonged had its settlements in al-Yamāmah, the tract of Najd overlooking the Persian Gulf, the ideas embodied in it had made their way across to the Western Ḥijāz and Tihāmah, and there left in current use these words of religious import, without any trace surviving

in the memory of men of their real origin. It is further necessary to suppose that the author of these ideas continuously maintained them in his home in Central Arabia, until in the year 9 or 10 after the Flight he set up as a serious rival in prophecy to Muḥammad.

The word *Ḥanīf*, except in verses attributed to men admittedly *Ḥanīfs* themselves, has so far been found used in the poetical literature of Muḥammad's time only by two poets of Hudhail, a tribe settled between Mecca and Medinah, Ṣakhr al-Ghaiy, who seems to have been a pagan, and Abū Dhu'aib, who was a Muslim born in the year 622 A.D. Islamic tradition knows of a number of religious thinkers before Muḥammad who are described as *Ḥanīfs*, and of whom the following is a list:—

1. Waraḳah b. Naufal, of Ḳuraish;
2. 'Ubaid-allāh b. Jaḥsh, of Asad b. Khuzaimah;
3. 'Uthmān b. al-Ḥuwairith, of Ḳuraish;
4. Zaid b. 'Amr b. Nufail, also of Ḳuraish.

These four are named by Ibn Isḥāḳ (p. 143). The first was a cousin of Khadījah, Muḥammad's first wife; the second, though a man of Asad, was the son of a Ḳuraishite mother, Umaimah, daughter of 'Abd-al-Muṭṭalib, and therefore himself a cousin of Muḥammad. Waraḳah became a Christian, and died in that faith during the *Fatrah*, or interval which elapsed between the first revelation to Muḥammad (chap. xcvi of the Ḳur'ān) and that which followed it. 'Ubaidallāh adopted Islām, and joined the emigration to Abyssinia in 615 A.D.; there he embraced Christianity, and died in that faith. Muḥammad married his widow, Umm Ḥabībah, daughter of Abū Sufyān. 'Uthmān is said to have repaired to the Greek Emperor at Constantinople, and there become a Christian. Zaid alone of the four never departed from his religious position, and died a *Ḥanīf* before the Prophet's mission. He was a near kinsman of 'Umar b. al-Khaṭṭāb, and his son Sa'īd b. Zaid was a distinguished Muslim. His faith is thus epitomised by Ibn Isḥāḳ (p. 144): "He withdrew from the worship of idols, abstained from eating that which

had died of itself, from blood, and from things sacrificed to idols, forbade the burying alive of female infants, and proclaimed that he worshipped the Lord of Abraham." Much verse of a religious character is ascribed to him, some of which will be referred to below.

Ibn Ḳutaibah adds to the above (*Ma'ārif*, Wüstenfeld's edition, pp. 28–30):—

5. Urbāb b. al-Bara', of 'Abd-al-Ḳais. He, however, is said to have been a Christian, and Christianity was widely prevalent along the southern shores of the Persian Gulf, where his tribe lived;

6. Umayyah b. Abi-ṣ-Ṣalt, of Thaḳīf, whose home was at aṭ-Ṭā'if;

7. Ḳuss b. Sā'idah, of Iyād, of whom there is a notice in the *Aghānī* xiv, 41–44. Muḥammad heard him at 'Ukāḍh, but he died before the Mission;

8. Abū Ḳais Ṣirmah b. Abī Anas, of the Banu-n-Najjār of Yathrib, who became a Muslim after the Prophet's flight to that place;

9. Khālid b. Sinān b. Ghaith, of 'Abs. His daughter became a Muslim.

To these should be added:—

10. Abū Ḳais Ṣaifī ibn al-Aslat, of the Aus-allāh of Yathrib. He led his tribe in the fratricidal conflict of Bu'āth. He did not accept Islam, but his verses quoted by Ibn Isḥāḳ show him to have been a *Ḥanīf*.

From the above it appears:—(1) that the bearers of the name *Ḥanīf*, so far as recorded (for the man of 'Abd-al-Ḳais may be neglected), all belonged to the Ḥijāz and the West of the Arabian Peninsula; (2) that their doctrine was distinct from Christianity, although several of those who professed the Ḥanīfite faith adopted that religion, and was also distinct from Islām; and (3) that it had certain specific features—rejection of idolatry, abstention from certain kinds of food, and the worship of "the God of Abraham"; ascetic practices, such as the wearing of sackcloth, are also ascribed to some of

the Ḥanīfs. There seems to be no reason to doubt that these Ḥanīfs are historical personages, or that their doctrines are in the main correctly described. One of the most notable of them, Umayyah b. Abi-ṣ-Ṣalt, was an opponent and rival of the Prophet, and composed elegies on those who fell at Badr. Much of his verse has survived, and in it the eclectic religion of the Ḥanīfs appears to be well portrayed. I know of no good reason for doubting its substantial authenticity; Islamic tradition would hardly have been likely to invent texts ascribing doctrines agreeing with Islam to an enemy of Muḥammad's; and the verse has a distinct and peculiar stamp, both of language and style, which seems to justify us in considering most of it to be really the work of Umayyah.

Now these are all celebrated men, many considerably older than the Prophet, with regard to whom there is no trace whatever in tradition of any connection with Musailimah and the Banū Ḥanīfah; their locality is remote from al-Yamāmah, and outside of the Ḥijāz and its neighbourhood, with one exception, we hear nothing of the use of the word *Ḥanīf*.

This exception is in the account of the death of Bisṭām b. Ḳais, a chief of Shaibān, one of the divisions of Bakr b. Wā'il, and thus a sister-tribe of Ḥanīfah, as related in the *Kāmil* of al-Mubarrad (ed. Wright, pp. 130–31).

Bisṭām, who is said to have been a Christian, with his brother led a raid upon the herds of the Banū Ḍabbah. While driving off the spoil of captured camels, he was pursued and thrust through with a spear by 'Āṣim b. Khalīfah of Ḍabbah. The stroke hurled him from his horse on to a bush of the shrub called *alā'ah*; as he lay there, his brother made as though he would return to his assistance, whereupon Bisṭām called out, "*Ana ḥanīfun in raja'ta.*" The sense of these words is taken by Professor Nöldeke (see Wellhausen, *Heidenthum*[2] p. 250) to be, "I will abjure Christianity and become a heathen if thou returnest!" The words appear to be a warning to his brother not to run the risk of being captured or slain. If this is right,

we must take *ḥanīf* here as used by a Christian Arab in the sense which the Aramaic equivalent *ḥanpā* bore to the Christian Aramæans from whom the Christianity of the Bakrites was derived—that is, as equivalent to pagan.

A similar story, with somewhat different surroundings, is told of the same Bisṭām in the *Naḳā'iḍ* of al-Farazdaḳ and Jarīr, and in the *'Iḳd al-Farīd* of Ibn 'Abd Rabbihi (ed. 1293) iii, 86. As given in the *Naḳā'iḍ*, Bisṭām, at the encounter of al-Ghabīṭ, was taken prisoner by 'Utaibah of Yarbū'; the companions of the latter called out to Bijād, Bisṭām's brother, *Kurra 'alā akhīk*, "Come back and help thy brother," hoping to capture him also. Bisṭām shouted to him, *In kararta, yā Bijādu, fa'ana ḥanīf!* It is clear from this version of the tale that we must read in the Kāmil, as Wright prints, *raja'ta*, and not, as Professor De Goeje suggests in the Critical Notes (p. 51), and as Professor Margoliouth translates (p. 482), *raja'tu*.[1]

Whether the meaning of *ḥanīf* here be heathen, as Nöldeke thinks, or Muslim, as al-Mubarrad appears to have supposed, it seems at any rate certain that it could not mean, in the mouth of a Bakrite and a neighbour of the Banū Ḥanīfah, a follower of Musailimah in monotheism. It would be exceedingly strange if the celebrity of that teacher had established the word in a sister-tribe as the name of a religious sect, having lost its original (supposed) meaning of member of the tribe of Ḥanīfah.

The chief of the Banū Ḥanīfah until 630 A.D., when he died, was Haudhah son of 'Alī. Wellhausen (*Skizzen* iv, p. 102, note) observes that he was the most powerful man of his day in Central Arabia; and as such he is mentioned among the kings to whom the Prophet sent special invitation to adopt Islam. He was the ally of the Persian king, and protector of his caravans between al-Madā'in and the (then) Persian province of al-Yaman. The story of his punishment of the Banū Sa'd of Tamīm, referred to by Professor Margoliouth on

[1] I am indebted to Professor Bevan for the reference to the story in the *Naḳā'iḍ*, which fixes the sense of Bisṭām's speech as reported in the Kāmil, as well as for other suggestions as to the interpretation of the passage.

p. 491 as 'unedifying' and a 'treacherous murder,' will be be found related in a slightly different form in Ṭabarī i, pp. 984 sqq.; I may also refer to my *Translations of Ancient Arabic Poetry*, p. 88. The act was certainly not 'a treacherous murder,' but a measure of legitimate reprisal —according to the ideas of the time—upon a robber tribe. Haudhah, moreover, acted as the agent of the Persian Governor of the Baḥrain Coast, and obtained, by his intercession, the release of a hundred prisoners of Tamīm. Now Haudhah was a Christian, and this is how Maimūn al-A'shā, the greatest poet of his day, celebrates his deed of mercy:—

فَفَكَّ عن مائةٍ منهم إسارَهُمُ واصبحوا كُلُّهم من غُلِّهِ خُلِعَا

بِهِمْ تقرَّبَ يَوْمَ الفِصْحِ ضاحِيَةً يَرْجو الإلاهَ بما أَسْدَى وما صَنَعا

"And there he loosed from their bonds a hundred out of their pain:

From all on that happy morn he cast the fetters away.

"These were his offering meet that Easter morning, with these

He came before God, in hope to win the meed of his grace."[1]

We do not know how far the tribe of Ḥanīfah followed Haudhah in adherence to Christianity. The tale told of 'Umair b. Sulmī in the *Kāmil* of al-Mubarrad, and referred to by Professor Margoliouth, does not mention that Christianity was then professed by 'Umair and his family; but I have not been able to discover in it "a rather *outré* form of paganism." Wright's edition of the *Kāmil* (p. 203) does not mention that the protection given by 'Umair to his client was written on an arrow; and in any case the story goes to show that 'Umair felt himself compelled by the obligations of *jiwār* to surrender his own brother, who had murdered the brother of his *jār*, to justice. There were five bishops in Ḳaṭar and its neighbourhood, the tract on the

[1] Ṭabarī l.c. p. 987. I have ventured to quote my metrical rendering, which is sufficiently close.

south of the Persian Gulf included in al-Yamāmah;[1] their influence no doubt extended a considerable way into the interior, as is testified by Christian names ('Abd-al-Masīḥ, Abū Maryam) borne by Arabs of the Upland. The deputation of Ḥanīfah, which visited the Prophet (with Musailimah in their company), were apparently Christians, for they had a church, with a *rāhib* or priest in charge, which they were ordered to destroy (Wellhausen, *Skizzen* iv, 157).

With Christianity in possession, before the appearance of Musailimah as a prophet, it is difficult to believe that he was the discoverer of the "religion of Abraham" and the propagator of the religious movement represented by the Ḥanīfs.

Al-A'shā himself belonged to another sub-section of Bakr, Ḳais b. Tha'labah. His home was at Manfūḥah in al-Yamāmah, no great distance from the place which was the headquarters of Musailimah, and it would seem that (some time after the poet's death) his tribe adhered to Musailimah when the latter set up as a prophet.[2] Al-A'shā was one of the quickest wits of his time; a man of wide experience who had travelled over the length and breadth of Arabia. His poems teem with acute observation of human nature, and he took a special interest in religious questions, though himself a free liver, and probably Epicurean in his view of things. The *ḳaṣīdah* which he addressed to Muḥammad when, after the truce of al-Ḥudaibiyah, he proposed to adhere to Islam, but was dissuaded from it by the Ḳuraish, is well known. But in all the extant poetry of al-A'shā there is not a word of Musailimah. This seems conclusive against the theory that, at any time before he emerged as a declared prophet, which was, we know, in the last year of Muḥammad's life, that teacher had established a reputation in al-Yamāmah which had led to the currency of *Muslim* and *Ḥanīf* as religious terms signifying adherents of his teaching.

Absolutely the only evidence which Professor Margoliouth brings forward to support his view is, first, the fable that

[1] See Sir H. Rawlinson in J.R.A.S., new ser. vol. xii, p. 222.
[2] See Yāḳūt iv, p. 669.

Musailimah was 150 years old when he was killed, and secondly, a tradition respecting the name *ar-Raḥmān* related by Ibn Isḥāḳ. The first, that Musailimah had reached any very advanced age when he stood forth as a prophet, seems to be refuted by the story of his relations with the prophetess Sajāḥ, and by the activity he displayed at the battle where he met his death. Al-Ya'ḳūbī relates (ii, 146) that he was thrust through with a spear by Abū Dujānah the Anṣārī, but forced his way up the shaft and killed his assailant, after which he was dispatched by the negro Waḥshī, the slayer of Ḥamzah, with a javelin.[1] The second piece of evidence deserves more consideration. The tradition as related by Ibn Isḥāḳ (p. 200) is as follows: "When the Meccans said, 'It has been reported to us that a man in al-Yamāmah called *ar-Raḥmān* is thine instructor: and in him we will never believe'—the following verse was revealed to the prophet (Sūrah xiii, 39):—'Thus have We sent thee to a people before whom other peoples have passed away, that thou mightest recite to them that with which We have inspired thee: and they refuse to believe in the Merciful (*ar-Raḥmān*): say, 'He is my Lord. There is no God but He. To Him do I commit myself, and to him is my conversion.'"

The tradition is not given with an *isnād*; but although in our ordinary Ḳur'āns the chapter (xiii, "Thunder") in which the verse stands is marked as given at Mecca, it is also reported by other authorities to have been revealed at Medina (see *Itḳān* p. 23).

In the *Adab*-work, quoted by Professor Margoliouth, called *Alif-Bā* (ii, p. 244), it is said that Musailimah was called *ar-Raḥmān* before the birth of Muḥammad's father 'Abdallāh, and that therefore the Ḳuraish, when they heard Muḥammad recite, "*Bismi-l-lāhi-r-Raḥmāni-r-Raḥīm*," used to say, "Thou art only making mention of the Raḥmān of al-Yamāmah." This, it will be seen, is quite another version of the tradition. Neither, in view of the circumstances

[1] It is noticeable that al-Ya'ḳūbī has also the fable of his 150 years, which is not therefore confined to Spain.

mentioned above, seems to possess much weight. *Raḥmān* was a novel word to the Arabs as a name of God. The Ḳuraish would not have it used at the treaty of al-Ḥudaibiyah in A.H. 6; and the story in the *Aghānī* xv, 138, of the remark on hearing it of Arbad, the brother of Labīd, shows that it was looked upon as representing some strange and outlandish deity, different from the generally known Allāh.

The foundation, therefore, for the hypothesis that Musailimah, at any time before the prophet's mission, is likely to have been sufficiently well known as a teacher to give wide currency to important religious terms like *Ḥanīf* and *Muslim*, seems altogether inadequate.

All that history, as authentic as any other record of the time, tells us of Musailimah is that he was one of a number of pretenders to prophethood who all arose about the same time, in the last year of Muḥammad's life and immediately after his death. Al-Aswad al-'Ansī in the Yaman, Musailimah in al-Yamāmah, Ṭulaiḥah in Asad, Sajāḥ in Tamīm, all apparently dealt in the same kind of religious wares. Al-Aswad, no less than Musailimah, practised conjuring (شعبذة, see Ṭabarī i, 1796). All had *mu'adhdhins* and daily prayers. All delivered utterances in *saj'*, in the style of the *kāhins*. Whether these approached in impressiveness those of Muḥammad in his early Meccan *sūrahs* is a matter of opinion; to me at least it seems that, if we may judge by what is recorded of them, they fall far short of the latter.

Having thus endeavoured to deal with the historical side of Professor Margoliouth's theory, I now proceed to deal with the linguistic. And here we must distinguish between *Ḥanīf* and *Muslim*: The latter word belongs to a root the various forms of which are well known and much used; the former stands, in its religious signification, by itself, and the other derivatives of the root afford little assistance in fixing its history and meaning.

Ḥanīf (with its plural *ḥunafā'*) occurs in the Ḳur'ān twelve times, six times in Meccan, and six in Medinian *Sūrahs*. In eight of these passages it is used to describe the *Millat Ibrāhīm*. In two of the Medinian *Sūrahs* (iii, 60,

and iv, 124) it is joined with *Muslim* or its verb (*aslama wajhahu*); in one (xcviii, 41, in pl.) or perhaps two (xxii, 32, also in pl.) it is used as equivalent to Muslim.

That a tribal name like Ḥanīfah should have given rise to an adjective *ḥanīf* is, I believe, a suggestion incapable of being supported by any etymological parallel. All names indicative of sects are *nisbahs* in *-ī*, and *Ḥanīfah* would thus have formed (as in the case of the division of Sunnīs following the Imām Abū Ḥanīfah an-Nu'mān) *ḥanafī*. Umayyah's use of *al-Ḥanīfah* for the collective body of *Ḥanīfs* is regular, just as *al-Mu'tazilah* stands for the Mu'tazilīs collectively; but the word has the article, and clearly has no connection with the tribal name Ḥanīfah, of which the article forms no part.

The word *taḥannafa*, meaning to act as a *Ḥanīf*, occurs in a verse of the poet Jirān al-'Aud ('Āmir b. al-Ḥārith of Numair, a sept of 'Āmir b. Ṣa'ṣa'ah), a *Jāhilī*.[1]

وَأَدْرَكْنَ أَعْجَازًا مِنَ اللَّيْلِ بَعْدَمَا ... أَقَامَ الصَّلَاةَ الْعَابِدُ الْمُتَحَنِّفُ

"And they (the camels) reached their destination in the latter part of the night, after that the devotee who practises austerities like a *Ḥanīf* had begun his prayers."

There does not appear to be any reason to connect تحنّف with تحنّث, a word which occurs only in a tradition relating to the Prophet, who is said to have practised austerities (*taḥannatha*) in a cave on Mount Ḥirā' before he received his revelation. It seems more probable that, as Dr. Hirschfeld suggests (*New Researches* p. 19, note)[2] تحنّث is taken from the Hebrew *teḥinnōth* prayers. *Ḥinth* means perjury, whether false swearing or the breaking of oaths, not *sin* in general; and thus the proposal to take *taḥannuth* as a privative formation, doing that by which sin is expelled, appears to be unnecessary.

[1] See Khizānah iv, 198.

[2] The same suggestion had been made many years before by Emanuel Deutsch - see his *Literary Remains*, p. 74.

The conclusion in regard to *Ḥanīf* is, I think, that its origin must be left unexplained, like that of many another word in the Ḳur'ān and the old poetry; we know approximately its meaning as a term of religion, but nothing certain as to its source. The most acceptable conjecture seems to me to be that of Sprenger, referred to on p. 479 of Professor Margoliouth's paper, that it is connected with the Hebrew *ḥānēf*, heretic; cases of identical roots which have violently opposed meanings in Hebrew and Arabic are by no means rare.

With *Muslim* the case is quite different. This word does not, like *Ḥanīf*, stand alone, but is merely the *nomen agentis* of a verb which is freely used throughout the Ḳur'ān in the past, the imperfect, the imperative, and the infinitive. No parallel can, I believe, be adduced for the formation of such a verb, in the fourth form, from a proper name.[1] The forms of the verb used in constructing denominatives are the first, second, and fifth. It would be contrary to all analogy to hold that *Muslim* is derived directly from Maslamah or Musailimah, and that the participle has then given rise to the other parts of the verb. For *aslama*, *yuslimu*, *aslim*, *islām*, the succession of ideas seems plain. *Salima* means "he was safe, at peace and rest;" *salm* and *silm* mean "peace, safety, quiet;" *aslama* thus means "he obtained peace by doing something or other," ordinarily by letting go or surrendering that which is the subject of dispute. We have the verb in the neutral sense of letting go in such phrases as (Zuhair i, 21):

فَشَجَّ بِهَا الأَمَاعِزَ فَهْيَ تَهْوِي هُوِيَّ الدَّلْوِ أَسْلَمَهَا الرِّشَاءُ

"He sped with her through the hard flinty spaces, while she galloped as swiftly as falls a bucket which has been let loose from the rope."

[1] I do not overlook the usage by which this form is employed for going to a place—*anjada*, *athama*, *aymana*: he went to Najd, to Tihāmah, to al-Yaman. But this specialized use is different from that suggested in Professor Margoliouth's paper.

and the following quoted by al-Aṣma'ī :—

تقولُ لی ودَمْعُها تُؤْآمُ كالدُّرِّ إذْ آسْلَمَهُ النِّظامُ

علی الذین احتملوا السَّلامُ

"She said to me, while twin tears fell from her eyes, like pearls which have been let go from the string—'Upon those who have gone their way be peace!'"

Then comes the sense of handing over to destruction, surrendering, deserting, which is, as Professor Margoliouth says, extremely common. Thus, in the account given in al-Anbārī's Commentary on the Mufaḍḍalīyāt of the first Day of al-Kulāb, when Shuraḥbīl the uncle of Imra'al-Ḳais was deserted by the men of Tamīm who formed part of his force, and met his death, the verb is several times employed, and the *maṣdar islām* is used of the act of desertion. A common subject of praise in a panegyric on a tribe is that they do not surrender a member or a client who by an act of violence has involved them in troublesome claims. Thus Zuhair says of 'Abs (xvi, 46):—

كرامٌ فلا ذو الوِتْرِ يُدْرِكُ وِتْرَهُ لَدَيْهِم ولا الجانی علیهم بِمُسْلَمِ

"Noble are they: the seeker of vengeance gains not his end with them, nor is the sinner against them given up."

It is very remarkable that in the Ḳur'ān there is no single instance of this use of the verb. Wherever used, أسلم, إسلام, مسلم have the religious sense and no other.[1] This sense of *aslama* is fully expressed by the addition *wajhahu li-llāh*, or *ilā-llāh*, e.g. in Ḳur. xxxi, 21 (Meccan); ii, 106; iii, 18; iv, 124 (Medinian). "To surrender one's face to God," to look to Him for guidance, to place oneself completely in His hands, seems a perfectly natural development

[1] The only possible exception is in Sūrah xxvii, 31 and 38. But as Solomon was a prophet, and Bilḳīs and her people approached him as believers, it is simplest to take the word here also in the ordinary sense.

of the sense of 'to surrender, let go.'[1] In the first of the passages quoted above, xxxi, 21 (a Meccan Sūrah), the phrase runs thus:—

وَمَن يُسْلِمْ وَجْهَهُ لِلَّهِ وَهُوَ مُحْسِنٌ فَقَدِ اسْتَمْسَكَ بِالْعُرْوَةِ الْوُثْقَىٰ

"Whoso setteth his face to God-ward and doeth good, hath indeed laid hold of the surest handle."

Here *aslama*, he let go, is contrasted with *istamsaka*, he laid hold of, and the nexus of ideas is plain.

Whether *islām* had this religious sense before Muḥammad seems doubtful. The only example of it is in the verses attributed, on p. 148 of Ibn Hishām, to Zaid b. 'Amr b. Nufail, the *Ḥanīf*:—

"I have surrendered my face to Him to whom the earth, that bears heavy rocks on her surface, surrenders herself:

"He spread her out, and when He saw that she had come to rest on the waters, He fastened upon her the mountains.

"And I have surrendered my face to Him to whom the clouds have surrendered themselves, bearing sweet limpid rain;

"When they are led along to a country, they obey the leading, and pour forth thereon their burden in full streams."

Perhaps, as Professor Margoliouth says, it is safest to regard these verses of the 'precursors' as fabrications based on the Ḳur'ān; but if so, it can hardly be asserted

[1] In the phrase *aslama wajhahu*, 'face' is to be understood as the equivalent of *nafs*, 'self.' Compare the verse in the *Ḥamāsah*, ed. Freytag, p. 47—*Innā lanurkhiṣu yauma-r-rau'i anfusanā*, 'we make ourselves cheap (i.e. risk our lives gladly) on the day of battle'—with the parallel passage quoted by the commentator: *wa'abādhulu fi-l-haijā'i wajhī*, 'and I give away my face freely in the fight.' Similarly, in Æthiopic, *rē'ēs*, 'head,' is often used for 'self.'

that the word before Muḥammad had a religious content. At the same time it may be said that the idea expressed in Zaid's verses, that there is an *Islām* of Nature as well as of Man, is not found in those words in the Ḳur'ān, where the verb is never used except of men and *Jinn*; and it seems not impossible that the verses may be authentic.

Self-surrender, *Islām*, is an idea of the highest religious value, not in the faith called after the Prophet Muḥammad alone. It is, I venture to think, the secret of the success of that faith with mankind, and it was the force and volume with which Muḥammad preached it that gave the conquering impulse to his creed. To ascribe this great idea, the expression of which seems sufficiently accounted for by the ordinary vocabulary of Arabic, to a misunderstanding of the name of a sect founded by an obscure teacher on the other side of Arabia, and that teacher such a one as Musailimah, seems to me a very singular example of extravagant conjecture.

Art. XXIX.—*Notes from the Tanjur.* By F. W. Thomas, M.R.A.S.

5. *Sarasvatīstotra* attributed to Kālidāsa.

The Tanjur contains, beside the *Meghadūta*, two short poems attributed to Kālidāsa, both mentioned by Huth in his analysis of *Mdo*, vols. cxvii–cxxiv (*Sitzungsberichte d. k. preuss. Akademie d. Wissenschaften zu Berlin*, 1895, xv, p. 17). One is entitled *Maṅgalāṣṭaka*, and is found in *Rgyud*, vol. lxxxvi, fol. 225. The other, a hymn to Sarasvatī (*Rgyud*, vol. lxxxii, foll. 199–200), I here transcribe with a tentative translation, which may perhaps enable scholars to estimate the probability of the supposed authorship, and to identify the work with the Sanskrit original if discovered. None of the numerous printed collections of Sanskrit stotras appear to contain anything corresponding to it, nor is it identical with any of the manuscript stotras to Sarasvatī which I have been able to examine. Perhaps some scholar may be able to discover verses cited from it.

The poem is in fifteen verses of two lines each, and there are some indications which point to the *Āryā* metre.

| Rgya . gar . skad . du | sva . ra . sva . sti[1] . sto . ttra . nā . ma | bod . skad . du | lha . mo . dbyaṅs . can . gyi . bstod . pa |

1. | ston . zla . rab . rgyas . ku . mud . duṅ . daṅ . chu . śel . gaṅs . ri . ltar . dkar . ba |
| rab . dkar . dkar . gsal . gzi . ldan . yi[2] . *h*phrog . lha . mo . dbyaṅs . can . phyag . *h*tshalo |

[1] This is the prevalent spelling in the block-print, which however here reads *Svorasvo*.

[2] *Sic* for *yid*: see the Lexica.

2. | mi . śes . gti . mug . rmoṅs . pa*h*i . tshogs . ni . kun . nas . *h*joms [1] |
| smraṅ . na . sun . *h*byin . thogs . med . kun . gzigs . spobs . pa*h*i . gter . mchog . rgyas . par . mdzod |

3. | sgrib . gñis . sprin . bral . blo . gros . *h*od . zer . stoṅ . ldan . rab . tu . *h*char . ka . yi |
| ñi . ma*h*i . zer . gyis . *h*byed . bya*h*i . padmo . rab . dul . kha . *h*byed . rnam . rgyas . pas |

4. | rab . tu . dri . żim . bsil . ṅad . ldan . pa*h*i . padmo*h*i . ze . *h*bru*h*i . ṅos . dag . la |
| bdag . blo*h*i . gus . pas . *h*thuṅs . pas . blo . gros . cher . rgyas . sbraṅ . rtsis . *h*gro . rnams . skyoṅs |

5. | gser . gyi . ri . daṅ . kun . mkhyen . chu . gter . lta . bur . kun . nas . lhun . chags . pa |
| rtsod . pa*h*i . phye . ma . leb . daṅ . bdud . daṅ . dus . kyi . rluṅ . gis . bskyod . ma . yin |

6. | bcu . drug . na . tshod . lta . bu*h*i . bu . mo . rab . mdzes . sgeg . pa*h*i . ñams . daṅ . ldan |
| lha . yi . rgyan . rnams . du . mas . khyod . kyi . lus . daṅ . yan . lag . mdzes . pa . yis |

7. | chu . *h*gram . gnas . nas . mgrin . sbon . dga*h* . bskyed . rgya . mtsho*h*i . lha . mo . dbyaṅs . can . ma |
| khyod . la . phyag . *h*tshal . btse . bas . bdag . blo*h*i . mi . śes . mun . pa . myur . du . sol |

8. | rab . tu . sñan . pa*h*i . dbyaṅs . ldan . dri . za*h*i . bu . mo . yid . *h*phrog . ma [2] |
| lag . gi . *h*du . byed . rab . tu . bsgyur . bas . tshaṅs . pa*h*i . gsuṅ . dbyaṅs . rnams . *h*byuṅ . bas |

9. | sgra . daṅ . tshad . ma . sñan . ṅag . mṅon . brjod . sdeb . sbyor . legs . bśad . chos . rnams . kun |
| pha . rol . yid . *h*phrog . *h*dzin . par . nus . pa . ci*h*i . phyir . bdag . la . mi . stsol . lags |

[1] This line lacks 4 syllables !
[2] Two syllables wanting !

10. | khyod . kyi . thugs . ni . kun . tu . mi . *g*yo . rgya . mtsho . chen . po . lta . bu . ste |
| thugs . rje*h*i . brlabs . śags . drag . tu . bskyod . pas . *h*gro . ba*h*i . gduṅ . ba . rab . tu . sol |

11. | dbaṅ . gi . rgyal . po*h*i . *h*byuṅ . gnas . yid . bžin . re . skoṅ . dbyaṅs . can . rgya . mtsho . yis |
| rmoṅs . pa*h*i . gduṅ . bas . gduṅs . pa*h*i . skye . bo . riṅs . por . skyoṅ . ba . daṅ [1] |

12. | gti . mug . dag . gis . blo . dman . skye . bo*h*i . re . ba . myur . du . skoṅs [2] |
| bdag . blo*h*i . ku . mud . da . ni . rab . tu . kha . zlum [3] . rnam . par . gnag . pa . la |

13. | bsil . zer . byed . pas . rab . tu . sprin . bral . dkyil . *h*khor . rnam . par . rgyas . pa . yis |
| ku . mud . kha . bye . rab . rgyas . ze . *h*bru*h*i . bsil . ṅad . rnam . par . sel . bar . mdzod |

14. | rab . tu . dri . bral . rkyen . gyi . dri . mas . ma . phog . ma . *h*gags . khyod . kyi . sku |
| kun . tu . tshaṅs . pa*h*i . dbyaṅs . can . ca . co*h*i . dri . bral . khyod . kyi . gsuṅ [4] |

15. | śes . bya . kun . la . thogs . pa . med . pa*h*i . ye . śes . daṅ . ldan . khyod . kyi . thugs |
| bstod . pa . *h*di . yis . bstod . la . dbyaṅs . can . ma . yis . blo . gros . mchog . rab . rtsol [5] |

| dbyaṅs . can . gyi . bstod . pa . *h*di . ni | lho . phyogs . kyi . rgyud . du . byuṅ . ba*h*i . mkhas . pa . chen . po . paṇḍi . ta . nag . mo*h*i . khol . gyis . dbyaṅs . can . ma . žal . gzigs . pa*h*i . dus . su . dgyes . te . bstod . pa . rdzogs . so ||
gaṅ . žig . *h*di . *h*don . pa . la . śes . rab . stsol . bar . khas . blaṅs . so |

[1] Two syllables wanting.
[2] Two syllables wanting.
[3] *Sic* for *zum*?
[4] Two syllables wanting.
[5] *Sic* for *stsol*?

| rgya . gar . gyi . mkhan . po . paṇḍi . ta . jñā . na . si . la . dañ | lo . tstsha . ba . dge . sloṅ . chos . *h*bar . gyis . bsgyur . ba*h*o ||

In the Indian tongue: *Sarasvatīstotranāma.* In the Tibetan tongue: *Lha . mo . dbyaṅs . can . gyi . bstod . pa.*

1. White as (night-) lotuses opening in autumn, as shells, as moonstone, as the Snowy Range,
   Having the radiance of the white-rayed (moon) at its whitest, heart-winning Sarasvatī, hail!
2. Vanquishing on every side the phantom throngs of the darkness of ignorance,
   Spread the excellent treasure of wisdom, all-seeing, untouched by contradiction in speech!
3. When grows the full[1] opening of the lips of the (day-) lotus, opened by the rays of the sun,
   That rises with a thousand rays, freeing the mind from the clouds of a double obscuration,
4. Cherish then the people with the wide-spread nectar of wisdom, drunk with the reverence of my heart,
   At the ends of the anthers of the exceedingly fragrant, cool-scented lotus![2]
5. Like the Golden Mountain, and like an ocean of omniscience, established fast on every side,[3]
   Unstirred by the butterflies[4] of contention and by the winds of desire and time,
6. Having the charming coquettish heart of a girl of about sixteen years,
   Thy form and limbs made fair with divers heavenly adornments,

[1] We here render *rab . tu,* as *rab . dul* = *praśama* seems inappropriate.
[2] In this and the preceding verse the Tib. *padmo* (fem. !), which might be thought to represent Sk. *Padmā,* seems to be no more than *padma* or *padminī.*
[3] To the Hindus, of course, the ocean with its regular tides, is a symbol of greatness which does not transgress its limits, a sublime conception perhaps suggested by their contrasted experience of rivers.
[4] *Phye . ma . leb* = 'butterfly,' corrupt?

7. Thy neck wet from standing at the shore,[1] O Sarasvatī, goddess of the ocean of delight,
   In kindness to him that does homage to thee, drive soon away the darkness of ignorance in my mind!

8. O thou of exceeding pleasant voice, charming the hearts of the Gandharva women,
   Since through the excellence of the Saṃskāras of the parts[2] arise in purity the sounds of speech,

9. Why dost thou not bestow upon me all the qualities of polished utterance,[3]
   Capable of captivating the hearts of others, grammar, logic, poetry, lexicography and metre?

10. As thy heart is like a great ocean altogether free from mutability,[4]
    With the force of the waves of compassion in vehement motion wash away the affliction of the world!

11. By the ocean of Sarasvatī, source of the wishing-jewel, fulfilling the heart's own aspirations,
    Save quickly the beings afflicted with the affliction of delusion!

12. Fulfil soon the aspirations of the beings whose minds are impaired by darkness:
    Though the (night-) lotus of my mind is all black with closed lips,[5]

13. Do thou, when the moon spreads her altogether cloudless halo,
    Dispel the chill[6] of the expanding anthers of the opening (night-) lotus.

[1] *Sbon* is apparently a misprint for *sbon*: or should we read *spon* and translate "'to him who from the *tīrtha* renders homage to thee with loud cries'" (*mgrin . spon* = *muktakaṇṭham*)? Or have we *mgrin . sṅon* = *Nīlakaṇṭha*?

[2] For the *saṃskāras* in speech compare *Kumārasambhava* vii, v. 90; *lag* = limb *anga*? But it would be possible to translate "since through the excellence of the *saṃskāras* of thy body arise the sweet sounds of the word of Brahmā."

[3] *Subhāṣita*?

[4] See note on v. 5.

[5] Perhaps this and the preceding line should be transposed: have we in this passage a reference to the author's own name (*kāla* = black)?

[6] Is there a play on the double sense of *jaḍa* = (1) 'chill,' (2) 'stupid'?

14. Thy form, all free from defilement, untouched, undimmed by the defilement of misfortune,[1]—
Thy speech, O all-pure Sarasvatī, undefiled by incoherence,—

15. Thy heart, endued with knowledge free from all contact with objects to be known,—
To him who with this hymn hymns these may Sarasvatī grant an excellent understanding!

Here ends this hymn to Sarasvatī, composed in gratification on the occasion of a vision of Sarasvatī by the great doctor, Paṇḍit Kālidāsa, born in a family of the southern region.

Whoso repeats it, to him the gift of knowledge is conceded.

Translated by the Indian teacher Paṇḍit Jñānaśīla and the lotsava Bhikṣu *Chos . hbar* (Dharmojjvala ?).

[1] *rkyen* = 'circumstance,' *συμφορά*?

ART. XXX. — *Miṣr in the Fifteenth Century.* By A. R. GUEST and E. T. RICHMOND.

IN speaking of Miṣr, it is in the first place necessary to define exactly what it is meant to include, as the name has been used at different periods with different meanings. Miṣr here denotes the southern half of the Arab capital of Egypt, as opposed to the northern one. For its application to this part of Cairo we have the authority of El Maqrîzî, but it must be borne in mind that this author does not always adhere to his own definition, and frequently uses Miṣr in a limited sense also. In order to avoid confusion the town to which the name Miṣr in this restricted sense is given will here be distinguished as Fusṭâṭ.

The boundaries of Miṣr are: east and west, El Muqaṭṭam and the Nile; south, a line the exact direction of which will be enquired into hereafter, but which may be now stated as about the parallel of Dair et Ṭîn; north, the main road running from the citadel to meet the Khalîj near the mosque of Saiyidah Zainab. The area within these boundaries includes all the earlier sites of the capital, the sites of everything, that is, which was built before the advent of the Fatimites. It can hardly be doubted that this area is the most hopeful field that exists for the exploration of the antiquities of the early Islamic period. Although it is now mostly desert, at one time or another practically the whole of it has been occupied by either dwellings or tombs, and it is the early date of the abandonment of many of its sites that renders them particularly interesting.

The remains of former occupation are, in many places, at once visible in mounds or traces of houses showing above ground, but there must be much more now buried of which the systematic examination could hardly fail to yield results of the greatest value to the study of early Arab civilization.

In such a land of antiquities as Egypt the claims of earlier antiquity seem to have prevented Miṣr from receiving the attention which it merits. No part of it appears yet to have been regularly explored. It is to be hoped that its scientific exploration will be undertaken before its most valuable remains disappear at the hands of the antiquity digger and the carrier of *sibâkh*. As a preliminary, the most accurate information which is obtainable from written records relative to topography is obviously desirable. Although something has been done to make the references of the mediæval native authors on Miṣr intelligible, and to locate the position of former sites, there still seems room for improvement in this direction.

It is the object of this paper to endeavour to reproduce the plan of Miṣr as it formerly was, in a little more detail than has been done hitherto, and, in order to avoid confusion, the enquiry will be as closely as possible confined to what was in existence in about the year 800 A.H., the beginning of the fifteenth century of our era, at which time the two principal authors on the subject whose works are generally available wrote their books.

These are El Maqrîzî and Ṣârim ed Dîn ibn Duqmâq. The Khiṭaṭ of the former and El Intiṣâr of the latter, both printed at Bulâq, the one in 1270 A.H., the other 1309 A.H., will be cited as Maq. and S.D. respectively; Napoleon's "Description de l'Egypte, État Moderne," planches, tome i, which has also been extensively used, will be cited as Descr. with the number of the plate, as Descr. xvi.

In the first place, a list may be given of the positions that can be fixed with certainty, including those of one or two buildings that date from after our period, but which are useful as marks. This list contains the name of every place within the limits of Miṣr which is of the period, and which it has been found possible to locate directly. Although some of these are not of much use for the present purpose, it may be useful to make it as complete as practicable.

The dates given are approximate. Nearly all the buildings mentioned still exist, but many have been restored or rebuilt.

Square in Map.	Name.	Earliest Date A.D.	
E 8	(1) Er Rumailah	13th cent.	Descr. xxvi, sect. ii, 228.
,,	(2) Ṣalîbat ibn Ṭûlûn	before 14th cent.	Descr. xxvi, sect. i, 122.
,,	(3) El Madrasat es Ṣurghutmishîyah	1356	
,,	(4) Bîr el Waṭâwîṭ	966	Descr. xxvi, sect. ii, 148.
,,	(5) Khângâh and Jâmi' Shaikhu	1356	Descr. xxvi, sect. ii, 121.
,,	(6) Jami' el Baqlî	1268	Descr. xxvi, sect. ii, 49.
,,	(7) Turbat Shajar ed Durr and Sakan el Khulafâ	1258	Rap. Com. Cons. Mon. Art. Arabe, Fasc. ii, p. 21; Fasc. xvii, p. 112.
,,	(8) Mashhad es Saiyidah Raqîyah	mentioned by Maq.	Descr. xxvi, sect. ii, 90.
,,	(9) Mashhad es Saiyidah Sakînah	,,	Descr. xxvi, sect. ii, 97.
,,	(10) Mashhad es Saiyidah 'Âyishah	?	Descr. xxvi, sect. ii, 37.
D 8	(11) Madrasat el Jawalî ...	1324	
,,	(11*a*) El Kabsh	before 14th cent.	Descr. xxvi, sect. ii, 167.
,,	(12) Qanâṭir es Sibâ'	circ. 1260	Descr. xxvi, sect. iii, 160.
C 8	(13) (Qaṣr el 'Ainî)	prob. circ. 1450	Descr. xvi.
,,	(14) Kanîsat Mâri Mîna or Bûmina	ancient, i.e. prob. before 640	
F 9	(15) Masjid el Juyûshi (*a*) ...	1105	
,,	(16) Khângâh Qausûn	1330	Descr. xxvi, sect. ii, 2.
E 9	(17) Bâb el Qarâfah	before 14th cent.	Descr. xxvi, sect. ii, 15.
,,	(18) El Madrasat el Ashrafîyah	circ. 1290	Descr. xxvi, sect. ii, 85.

Square in Map.	Name.	Earliest Date A.D.	
E 9 (19)	Mashhad es Saiyidah Nafîsah	824	Descr. xxvi, sect. ii, 81.
D 9 (20)	Mashhad Zain el 'Âbidîn	740	Descr. xv, "Zénnou."
F 10 (21)	Qubbat el Imâm esh Shafi'î	818	
,, (22)	Turbat es Sâdat eth Tha'âlibah	1213	
,, (23)	Turbat el Laith ibn Sa'd	1243 (?792)	
D 10 (24)	Zâwiyat Abî Sa'ûd ...	1517	Descr. xv.
C 10 (25)	Jâmi' 'Amr	641	Descr. xvi.
,, (26)	Masjid es Suwaidî ...	...?before 15th cent.	Rap. Com. Cons. Mon. Art. Arabe, Fasc. xviii, p. 141.
B 10 (27)	El Miqyâs and Raudah ...	862	
F 11 (28)	Turbat 'Uqbah ibn 'Âmir	678	
C 11 (29)	Qaṣr esh Sham' ... ... Containing:—	before 641	Descr. xvi.
	(*a*) Kanîsat el 'Aḍra (*b*) Kanîsat el Mu'allaqah (*c*) Kanîsat Barbârah (*d*) Kanîsat Mâr Jirjis (*e*) Kanîsat Bû Sarjah (*f*) A Jewish Synagogue		v. Butler's "Ancient Coptic Churches."
,, (30)	Dair Bâblâyûn	ancient	
,, (31)	Dair Yuḥanna	,,	
,, (32)	Dair Tadrûs	,,	
C 12 (33)	Dair Mikâ'îl	,,	
,, (34)	Ribâṭ Âthâr en Nabî ...	circ. 1300	Descr. xv.
C 13 (35)	Dair et Ṭîn	ancient	Descr. xv.
F 14 (36)	Basâtîn el Wazîr	circ. 1000	Descr. xv.

To this list a few may be added whose derivation, though not absolutely direct, does not seem to leave room for much error:—

E 8 (37) El Qubaibat contained Jâmi' el Baqlî before mentioned.[1]

E 9 (37*a*) Et Turbat el Khâtûnîyah and Turbat Umm Ṣâliḥ, 1284 A.D. = Tombeau Fatma Khâtûn, v. Com. Cons. Mon. Art. Arabe, Fasc. xviii, p. 110, and cf. S.D. iv, 125, l. 3; Maq. ii, 394, l. 26.

D 10 (38) Kaum el Jârih was the site of Zâwiyat Abî Sa'ûd before mentioned, v. Ibn Îyâs, Badâ'i, iii, 75, l. 25.

(39) Kanîsat Abu Shanûdah (or Kanâ'is) is the same as Dair Abî Saifain, which contains a church dedicated to Shanûdah.

(40) Jâmi' el Kharrûbî is marked in Descr. xvi, 20, but there were three mosques of this name in the vicinity, and it is impossible to be certain which one this is, especially as Maq. has confused his own references. It is probably Jâmi' Badr ed Dîn el Kharrûbî.[2]

(41) Er Rab' el Karîmi follows, according to the Rapports of the Comité, from the position of Masjid es Suwaidi, v. ante.

C 11 (42) Kaum ibn Ghurâb. The mound seems to have disappeared, but we still find Shâri' Kaum ibn Ghurâb, which is doubtless close to its site.

El Madâbigh, now the name of a station on the Ḥulwân railway, seems not to be the same site as the El Madâbigh mentioned by S.D., although the latter was not far off.

(43) Esh Sharaf,[3] a rocky knoll near the mosque of Zain el 'Âbidîn. This seems to be the place marked.

We will leave Qanṭarat es Sadd and Dâr en Nuḥâs for discussion a little further on, as their position is a little more doubtful; and now commencing at the north-west angle of Miṣr we will proceed to sketch in from description.

El Jisr el A'ẓam led from El Kabsh to Qanâṭir es Sibâ'. It separated Birkat el Fîl[4] from Birkat Qârûn.[5]

Khaṭṭ Qanâṭir es Sibâ' seems probably to have led along El Jisr el A'ẓam; the references are a little obscure, and

[1] Maqrîzî, ii, 245, l. 31.
[2] Maq. ii, 369, l. 31.
[3] Maq. i, 125, l. 23.
[4] Descr. xxvi.
[5] Maq. ii, 165, l. 34.

the two, being once mentioned together, may have been separate.[1]

Birkat Qârûn. El Jisr el A'ẓam gives a north limit. It was overlooked by El Kabsh,[2] bounded on one side by Khaṭṭ es Sab' Siqâyât[3] and by Ḥikr Aqbugha.[4] A passage might lead one to suppose that the Birkah was on the *left* of one going from Ḥadrat ibn Qamîḥah to Qanṭarat es Sadd.[5] It was between Ḥadrat ibn Qamîḥah and El Jisr el A'ẓam.[6]

Taking the places just mentioned in sequence:

Khaṭṭ es Sab' Siqâyât. At one extremity of it was Kanîsat el Ḥamra[7] (this church can be shown to have been near the present Shâri' en Nâṣirîyah). It must have passed close to Qanâṭir es Sibâ',[8] and it seems to have led to Khaṭṭ Qanṭarat es Sadd.[9] Zâwiyat ed Dimyâṭî was between it and Qanṭarat es Sadd.[10]

Ḥikr Aqbugha was divided in two by the Khalîj, and reached to near its mouth.[11]

Ḥadrat ibn Qamîḥah is described as near the mosque of Ibn Ṭûlûn,[12] behind it,[13] near the tomb of Zain el 'Âbidîn[14] and near the tanks on the road to Miṣr el 'Atîqah.[15] The tanks here spoken of seem to have been Ḥauḍ ed Dimyâṭî and Ḥauḍ et Ṭawâshî = Ḥauḍ ibn Kaisân.

From the above it seems likely that Ḥadrat ibn Qamîḥah ran from about the present Bâb et Ṭailûn towards Qanṭarat es Sadd. It will be observed that the statement that Birkat Qârûn was between Ḥadrat ibn Qamîḥah and El Jisr el A'ẓam supports the above, but that it is not consonant with a position for Birkat Qârûn on the *left* of one going from

[1] Maq. i, 305, l. 13; ii, 116, l. 6; ii, 512, l. 4.
[2] Maq. ii, 133, l. 29.
[3] Maq. i, 347, l. 19; ii, 161, l. 20.
[4] Maq. ii, 161, l. 22.
[5] Maq. i, 304, l. 34.
[6] Maq. ii, 161, l. 14.
[7] Maq. ii, 113, l. 39.
[8] Maq. ii, 146, l. 31.
[9] Maq. ii, 165, l. 13.
[10] Maq. ii, 430, l. 23.
[11] Maq. ii, 116, l. 5; 512, l. 18.
[12] Maq. ii, 326, l. 33.
[13] Maq. ii, 161, l. 13.
[14] Ibn Îyâs, Badâyi', i, 48, l. 1.
[15] Ibn Îyâs, ii, 156.

Ḥadrat ibn Qamîḥah towards Qanṭarat es Sadd. The passage which has been referred to must therefore be read as giving this place to Ibn Ṭûlûn's Mâristân. Another reference stating that Ḥadrat ibn Qamîḥah was near Birkat el Fil[1] also requires explanation. It is to be accounted for by Birkat Qârûn being sometimes called Birkat el Fîl eṣ Ṣughra, v. Maq. i, 343, l. 25.

A passage in Ibn Îyâs[2] may here be noticed which leads to the inference that the present south wall between this point and Bâb el Qarâfah had not been built in the sixteenth century.

To the south of Birkat Qârûn was a mound called *Kaum el Asârî* or *El Asra.*[3] Opposite it were *Ḥauḍ* and *Zâwiyat ed Dimyâṭî,*[4] near one another. The Ḥauḍ was at the end of a garden called Jinân el Ḥârah,[5] which was built over in Maqrîzî's time, and formed part of Ḥikr Aqbugha;[5] it was therefore to the west of the Kaum. The Zâwiyah was between Khaṭṭ es Sab' Siqâyât and Qanṭarat es Sadd.[6]

Es Sab' Siqâyât may be mentioned here. It was on 'the Birkah'[7] (i.e. either El Birkat en Nâṣirîyah or El Fîl), and was connected with Bîr el Waṭâwîṭ,[8] whence it was supplied with water.[9] It had been built in 966 A.D. and ruined before the fifteenth century. It seems to have been near the Jamâmîz es Sa'dîyah,[10] which may be conjectured to have given their name to the present Darb el Jamâmîz. They were opposite the churches of El Ḥamra,[10 11] which were demolished in 1310 A.D. The reason for discussing the position of Es Sab' Siqâyât here is to show that it has nothing to do with Es Sab' Sawâqî of Descr. xvi, with which, owing to the similarity of its name, it might easily be confounded.

[1] S.D. v, 45, l. 11.
[2] Badâ'i, iii, 36, l. 25.
[3] Maq. i, 347, l. 20.
[4] Maq. ii, 161, l. 22.
[5] Maq. ii, 116, l. 8.
[6] Maq. ii, 430, l. 23.
[7] Maq. ii, 245, l. 31.
[8] Maq. ii, 135, l. 32.
[9] Maq. ii, 135, l. 35.
[10] Maq. ii, 115, l. 23.
[11] Maq. ii, 512, l. 28.

Qanṭarat es Sadd. It is probable that this bridge and the mouth of El Khalîj were in the fifteenth century in the same place as when the Khalîj was filled up a few years ago. The name of the bridge, being a general one, affords no proof, but the position of Es Sab' Sawâqî, which are ancient, at least fifteenth century, and a statement[1] that Kanîsat Bûmina was near Es Sadd, which agrees fairly well with its position, seem to justify this conclusion.

Mansha'at el Mihrânî was on the west bank of the Khalîj, at its mouth.[2]

Mauradat el Ḥalfa was on the south of the Khalîj at its mouth.[3]

Khaṭṭ Qanṭarat es Sadd faced Mansha'at el Mihrânî on the east side of El Khalîj.[4] The expression used appears to be ambiguous, but the road seems to have been a continuation of Khaṭṭ es Sab' Siqâyât, and thus ran parallel to the Khalîj.

El Kaum el Aḥmar was in Mansha'at el Mihrânî[5] on the west bank of the Khalîj.[6] It had been on the bank of the Nile in about 600 A.H., and some idea of its position will be obtained from the direction of Khaṭṭ es Sâḥil el Qadîm.

El Jâmi' el Jadîd en Nâṣiri (1312 A.D.)[7] was a building of considerable size, on the Nile bank in Mauradat el Ḥalfa.[8] It was evidently not far from the mouth of the Khalîj. A passage that tells us it was opposite the end of Rauḍah[9] seems likely to refer to the position of the end of that island at the date that El Jâmi' el Jadîd was built.

The position of the extremity of Er Rauḍah in about 1600 A.D. is shown by a passage in Ibn Îyâs.[10]

[1] Maq. ii, 511, l. 20.
[2] Maq. ii, 117, l. 22.
[3] S.D. v, 40, l. 20.
[4] Maq. i, 343, l. 17.
[5] Maq. i, 346, l. 8; ii, 283, l. 30.
[6] Maq. ii, 146, l. 21.
[7] S.D. iv, 76, l. 6.
[8] S.D. iv, 101, l. 15.
[9] S.D. iv, 116, l. 11.
[10] Ibn Îyâs, Badâ'i, iii, 231, l. 25.

Between Mashhad Zain el ʻÂbidîn and Qanṭarat es Sadd was a garden called *Bustân et Ṭawâshî*,[1] formerly Bustân ibn Kaisân.[2] Facing this garden,[3] to the west of it,[4] and divided from it by a road called Khaṭṭ el Marâghah,[5] was another garden called Bustân el Jurf.

Bustân el Jurf took its name from a bank thrown up by the Nile, near Kaum el Aḥmar.[6] One may assume, therefore, that one end or side of it was near that mound. Between Kaum el Aḥmar and Bustân el Jurf was Khaṭṭ Bain ez Zuqâqain, on the east side of El Khalîj.[6] Also, behind Bustân el Jurf was a church among mounds.[7] The church is not named, but Kanîsat Marî Mîna seems to be the one referred to.

The object of attempting to fix the position of these gardens, which by itself has small interest, is to aid in the determination of the site of the north gate of Fusṭâṭ, which is, of course, a much more important point.

To do this it is now necessary to consider the direction of two roads, one of which led up to the gate. These were Khaṭṭ es Sâḥil el Jadîd and Khaṭṭ es Sâḥil el Qadîm. The former was close to and along the Nile bank in Maqrîzî's day, and it is certain that the Nile bank in this part, if it has altered in direction at all, cannot have done so very much. The position of El Miqyâs would not allow of its having altered to the east. Qaṣr el ʻAini, of which the earliest notice that we have been able to find is a little less than a century after Maqrîzî, but which appears to date almost from his time, was, when first mentioned, and probably always has been, on the Nile bank. Also Es Sabʻ Sawâqî, which seem to be ancient, could hardly have been built far from the Nile. *Khaṭṭ es Sâḥil el Jadîd* led from a street adjoining Er Rabʻ el Karîmî to Mauradat el Ḥalfa.[8]

[1] Maq. i, 299, l. 3.
[2] Maq. i, 344, l. 23.
[3] Maq. ii, 146, l. 18.
[4] Maq. ii, 197, l. 23.
[5] Maq. i, 345, l. 28.
[6] Maq. ii, 146, l. 21.
[7] Maq. ii, 197, l. 26.
[8] S.D. v, 40, l. 19.

Both the foregoing have been mentioned above, and it may be concluded that Khaṭṭ es Sâḥil el Jadîd is identical with the street shown as bordering the Nile in Descr. xvi, a street most of which has now disappeared.

Khaṭṭ es Sâḥil el Qadîm ran from Sûq el Ma'ârîj (El Qadîm) to El Kabbârah, reaching as far as Bustân el Jurf and Bustân ibn Kaisân.[1] The above is the *line* of Sâḥil el Qadîm; the actual street stopped at El Kabbârah, just outside the gate of Fusṭâṭ, where it joined Khaṭṭ el Marâghah.[2]

Es Sâḥil el Qadîm, having once been the Nile bank, the Khaṭṭ must of course have passed to the west of Dair Abu Saifain, and what has been cited seems enough to show that it probably took much the same direction as the street which is shown in Descr. xvi, parallel to the one which has just been identified with Khaṭṭ es Sâḥil el Jadîd, if indeed it is not actually identical with it. At S.D. v, 40, there is an account of both these streets, giving the turnings from each, taken in order[3] from the south. By starting from the fixed points of Er Rab' el Karîmî and the approximately known position of El Jâmi' el Jadîd en Nâṣiri in Khaṭṭ es Sâḥil el Jadîd and from Kanîsat Abî Shanûdah in Khaṭṭ es Sâḥil el Qadîm it is possible to get with some degree of nearness the place of what intervened. If this is done by the approximate method (which seems the only one possible) of setting out the turnings on the map at average distances, it will be found that the turnings to the Jâmi' Dâr en Nuḥâs[4] of Descr. xvi will agree with very fair exactness with those in the description from Khaṭṭ Sâḥil el Qadîm and Khaṭṭ Sâḥil el Jadîd to Madrasat Ṭaibars.

This Mosque of Ṭaibars was in Dâr en Nuḥâs,[5] so that it appears quite likely that it may have been the same as Jâmi' Dâr en Nuḥâs.

As Dâr en Nuḥâs was evidently a long building, the positions of 'Aṭfat Dâr en Nuḥâs and Jâmi' Dâr en Nuḥâs,

[1] Maq. i, 286, l. 32.
[2] Maq. i, 345, l. 27.
[3] It is almost certain that these turnings are given in sequence.
[4] No longer exists.
[5] S.D. iv, 42, l. 14.

marked in Descr. xvi, being about 300 metres apart,[1] it does not of itself afford a good fixing point, so it has not been included in the preliminary list.

Taking the position assigned—and though it is realized that this position may be not absolutely correct, it seems hardly likely that it can be very far in error—we get a reasonable amount of space for *Bustân el 'Alîmah*, which was south of El Jâmi' el Jadîd en Nâṣiri[2] and also must have been east of Khaṭṭ es Sâḥil el Jadîd, as between it and Kaum el Kabbârah was the gate of Fusṭâṭ, which was called Bâb Miṣr and Bâb es Sâḥil.[3]

This Kaum el Kabbârah in Es Sâḥil el Qadîm,[4] to the eastward of the gate,[5] may very well be a mound which is now surrounded with buildings, and which comes just in the position where our working out would place it. Before finally quitting the district which lies to the north of Fusṭâṭ, two buildings which are now prominent features may be mentioned. It will be noticed that the shrine of *Saiyidah Zainab*, now one of the most celebrated holy places of Cairo, has not been spoken of.

This shrine is attributed to Zainab bint 'Ali ibn Abi Ṭâlib (El Kubra), fl. *circâ* 650 A.D., and is undoubtedly a spurious one.[6] Whether it is of modern origin, or whether it dates back as far as the time of El Ḥâkim, who appears to have been the fabricator of a number of shrines of 'Ali's children, is a question that need not be discussed here. No mention of the tomb of this Zainab is found in Maq. S.D. mentions once the tomb of Zainab,[7] without saying which Zainab is intended. The indication given by him of its position might accord with that of the present Jâmi' es Saiyidah Zainab; it seems, however, more likely that he refers it to another

[1] v. also S.D. iv, 89, l. 16; contained eight masjids.
[2] Maq. i, 344, l. 29; ii, 304, l. 16.
[3] Maq. i, 344, l. 29; i, 347, l. 28.
[4] Maq. i, 305, l. 12.
[5] Maq. i, 344, ll. 8, 9.
[6] *Vide* the quotations from Ibn Jubair and Es Sakhâwi cited by 'Ali Bâsha Mubârak: Khiṭaṭ, part v, pp. 9, 10.
[7] S.D. iv, 121, l. 9.

place. The fame of the shrine of Zainab seems to have sprung up in the sixteenth century.[1]

The second construction is the present aqueduct. El Isḥâqî attributes this to El Ghaurî,[2] as Mr. Lane Poole points out. Medallions on the aqueduct appear, however, to bear the name and titles of Qâ'it Bâ'i, so that El Isḥâqî can hardly be correct. It is remarkable how little is said about the aqueduct which was in existence before Maq.'s time. The only two passages we have found are those in Maq. ii, 230, ll. 18, 31; from these one can gather that the aqueduct, repaired in 1409–10 A.H., was made of stone. It can hardly have been different from the one that En Nâṣir is described as going along from the Citadel to *Es Sâḥil* in 1340–1 A.D., and Es Sâḥil in this place seems to mean Es Sâḥil el Jadîd, and not to be used in the purely general sense of 'shore.'

If this is correct, it follows that the aqueduct of 1340–1 A.D. followed the same line as the present one, and it seems very likely indeed that the two are identical; the aqueduct now to be seen may thus date from before the time of En Nâṣir, even from that of the foundation of the Citadel, having merely been repaired by Qâ'it Bâ'i and El Ghaurî and others before them.

Coming now to the interior of Fusṭâṭ. From *Jâmi' 'Amr ibn el 'Âs* the approximate position of the following can be derived:—

Qibli (S.E.). El Madrasat es Ṣâḥibîyah el Bahâ'iyah,[3] Zuqâq el Qanâdîl,[3] El Madrasat[4] esh Sharîfîyah.

Sharqi (N.E.). Dâr 'Amr b. el 'Âṣ es Sughra[5] and El Kubra.[6]

Gharbî (S.W.). Sûq el Ghazal,[7] El Akfânîyîn,[7] Madrasat Yâzkûj.[8]

Baḥri (N.W.). Es Naḥḥâsîn,[9] Warrâqîn,[10] Ṭarâifîyin, etc.[10]

[1] *Vide* quotations from Esh Sha'rânî, 'Ali Bâsha Mubârak: Khiṭaṭ, part v, p. 10.
[2] Isḥâqî, Laṭâ'if, etc., reign of El Ghaurî.
[3] Maq. ii, 370, l. 9.
[4] Maq. ii, 188, l. 3.—S.D. iv, 93, l. 11, says "Sharqî."
[5] S.D. iv, 60, l. 3.
[6] S.D. iv, 7, l. 11.
[7] S.D. iv, 60, l. 6.
[8] S.D. iv, 61, l. 24.
[9] S.D. iv, 61, l. 16.
[10] S.D. iv, 61, l. 22.

From *Qaṣr esh Sham'* can be derived: Es Sûq el Kabîr, entered by a road leading under Kanîsat el Mu'allaqah[1] (a church still existing).

Shâri' es Sûq el Kabîr appears to have run east and west to the Nile.[2]

Sharqî (nearly North). Darb el Ḥajar.[3]

Baḥri (nearly West). Darb Maḥaṭṭ el Qirab.[4]

Darb el Ḥajar joined a place called Maḥras Banânah,[4] which was the end of a street called El Muṣâṣah[5] (or El Mamṣûṣah).[6] The other end was at Saqîfat Khairah,[7] which was connected by streets to Es Sûq el Kabîr.[8] El Muṣâṣah must therefore have run generally parallel to the east wall of the fortress of Qaṣr esh Sham'.

At S.D. iv, 83, l. 23, we find an account of the mosques between Zuqâq el Qanâdîl and Kaum el Jâriḥ. On the assumption that these are given in order, which seems to be the case, we can fix approximately: Darb el Qaṣṭalâni,[9] which led to Khaṭṭ Bain el Qaṣrain,[10] Sûq Barbar[11] and Suwaiqat Nauwâm.[12]

Suwaiqat Nauwâm was Baḥri, i.e. N. or N.W. of Kaum el Jâriḥ.[13]

Bain el Qaṣrain was next to Dâr 'Amr ibn el 'Âs es Ṣughra,[14] and apparently at its N.E. corner, as El 'Akkâmin led thence to Suwaiqat el 'Aitham.[15] Suwaiqat el 'Aitham seems to have been between Sûq Barbar and El Qashshâshîn. El Qashshâshîn was close to Sûq Wardân.[16]

Sûq Wardân was joined by streets to places like El Khashshâbin,[17] El 'Addâsîn,[18] on the west of Fusṭâṭ,[19] to Sûq Âḥâf,[20] which

[1] S.D. iv, 26, l. 17.
[2] S.D. iv, 80, l. 8.
[3] S.D. iv, 26, l. 17.
[4] S.D. iv, 26, l. 19.
[5] S.D. iv, 26, l. 11.
[6] S.D. v, 38, l. 11.
[7] S.D. iv, 25, l. 20.
[8] S.D. iv, 25, l. 13.
[9] S.D. iv, 83, l. 27.
[10] S.D. v, 39, l. 8.
[11] S.D. iv, 84, l. 3.
[12] S.D. iv, 84, l. 12.
[13] S.D. iv, 53, l. 9.
[14] S.D. iv, 7, l. 1.
[15] S.D. iv, 18, l. 11.
[16] S.D. iv, 39, l. 4.
[17] S.D. iv, 20, l. 16.
[18] S.D. iv, 27, l. 1.
[19] S.D. v, 38-40.
[20] S.D. iv, 27, l. 3.

was connected to Sûq Nauwâm in the N.E. corner, and to Kaum el Jâriḥ.[1] It was an important market, to judge from the number of roads converging on it, and the centre of a triangle whose angles are at Kaum el Jâriḥ, the turning to El Khashshâbin from Es Sâḥil el Qadîm, and a point midway between Jâmi' Amr and Kanîsat Shanûdah is probably not far from its site.

El Ma'ârîj is a place that is often mentioned. It must have been opposite Qaṣr es Sham'.[2] Its junction by various streets to the end of Khaṭṭ es Sâḥil el Qadîm on the one hand and to Darb Maḥaṭṭ el Qirab on the other can be traced, though it has not been found possible to locate it more precisely than has been done, nor does its exact location seem to be of much importance.

We now come to the south boundary of Fusṭâṭ, which, like the northern one, cannot be fixed with certainty. Some indications, however, are to be found which give its position within limits. It was certainly north of Kanîsat Mikâ'îl,[3] and it was with equal certainty south of Qaṣr esh Sham'. It was probably nearly exactly half-way between the two, close to Dair Tâdrûs and Dair Bâblâyûn. In support of this the following may be advanced:—

(*a*) There seems to have been a gate in the town wall called Bâblûn[4] (Bâblâyûn). The name itself would lend some colour to our supposition, but, in addition, this gate was evidently not far from Kaum ibn Ghurâb.[4]

The *exact* position of Kaum ibn Ghurâb does not appear to be ascertainable now,[5] but it was doubtless close to the street which has been mentioned as a point of departure. It does not seem quite clear whether Bâb el Qanṭarah, which is often mentioned, was actually in the south wall or a little to the outside. We read of Bâbai el Qanṭarah and Bâb el Qanṭarah el Juwânî, which show at any rate that there

[1] S.D. iv, 33, l. 16.
[2] Maq. i, 286, l. 32; 343, l. 38. S.D. iv, 77, l. 24.
[3] Maq. ii, 517, l. 12.
[4] S.D. iv, 53, l. 2.
[5] v. however S.D. iv, 107, ll. 20, 21.

were two, and perhaps it is this that makes it difficult to understand the references, some of which probably speak of one and some of the other. Bâbai el Qanṭarat were, at all events, also close to Kaum ibn Ghurâb.[1]

(*b*) Outside Bâb el Qanṭarah were two Birkahs—Birkat Shaṭa,[2] or Esh Shaqqâf,[3] and Birkat esh Shu'aibîyah. Both these were filled up in the fifteenth century.[4] *Birkat Shaṭa* was on the left of one going out from Bâb el Qanṭarat to Jisr el Afram and Ribâṭ el Âthâr.[5]

Jisr el Afram is described as between El Madrasat el Mu'izzîyah, south of [Miṣr] Fusṭâṭ, and Ribâṭ el Âthâr.[6] The precise position of El Madrasat el Mu'izzîyah has not been determined, but since Kanîsat Tâdrûs and Kanîsat Bâblâyûn were on Ṭarîq Jisr el Afram[7] and Kanîsat Mikâ'îl was near the Jisr,[8] this gives us its direction.

The second Birkah, *Birkat esh Shu'aibîyah*, which had originally an area of 54 fiddans,[9] was between Jisr el Afram and Er Raṣad.[10] It was opposite Kanîsat Mikâ'îl, separated by a dyke on the north from Birkat Shaṭa,[11] and adjacent on the south to Birkat el Ḥabash and the lands of El Ma'shûq. The latter will be mentioned presently, but in connection with the position of Bâb el Qanṭarah the above shows that room must be allowed for Birkat Shaṭa somewhere in the direction indicated to the north of the rocky ground, which could not, of course, ever have been the site of a birkah.

(*c*) Both Birkat Shaṭa and Birkat es Shu'aibîyah were supplied formerly by a canal called Khalîj Banî Wâ'il; from a bridge on this Khalîj, Bâb el Qanṭarah derived its name.[12]

[1] S.D. iv, 52, l. 6; 53, l. 1.
[2] Variously spelt by S.D.
[3] The two seem to have been the same. Cf. Maq. ii, 161, l. 11; ii, 303, l. 31.
[4] Maq. ii, 158; 161.
[5] Maq. ii, 161, ll. 7, 10.
[6] Maq. ii, 165, l. 23.
[7] Maq. ii, 511, l. 39; 512, l. 2.
[8] Maq. ii, 517, l. 12.
[9] Maq. ii, 159, l. 5.
[10] Maq. ii, 158, l. 36.
[11] Maq. ii, 159, l. 21.
[12] Maq. ii, 159, l. 1.

The mouth of Khalîj Banî Wâ'il seems to have been near Kanîsat Mikâ'îl.[1]

El Ma'shûq adjoined Ribâṭ el Âthâr. A canal close to El Ma'shûq led from the Nile to Birkat esh Shu'aibîyah.[2]

Er Raṣad, which has just been mentioned as one of the guides to the position of Birkat esh Shu'aibîyah, was at the south-west angle of Miṣr.[3]

It was a cliff, steep to the west; sloping so gently to the east that, looked at from El Qarâfah, the rise of the ground was hardly perceptible.[4] This natural feature is easily identifiable. It is the Jabal Jehusi[5] of Pocock, the Hauteurs St. George of Napoleon's description.[6] It received its name from a mosque called Masjid er Raṣad or Masjid el Juyûshi (*b*)[7] (whence Pocock's name), built by El Afḍal in 498 A.H. (1105 A.D.).

It would be very natural to suppose that this Masjid el Juyûshi (*b*) was the same as the Masjid el Juyûshi (*a*) still existing on the Muqaṭṭam hill behind the Citadel, especially as the latter was also built by El Afḍal in the year mentioned. They are certainly distinct, as the position of Er Raṣad cannot be in the least doubtful. Possibly the date reported by Ibn Khallikân for the building of Masjid er Raṣad may be the result of a confusion with that of the building of the Masjid el Juyûshi on El Muqaṭṭam.

Er Raṣad was the site of the old fortress called Bâblâyûn[8] (Babylon), frequently confused with Qaṣr esh Sham', but actually quite distinct from it. A clear summary of the case for the existence of an ancient Babylonian fortress separate and distinct from Qaṣr esh Sham' will be found in Butler's "Ancient Coptic Churches," vol. i, pp. 171–173. After a review of the evidence of Strabo, Diodorus Siculus,

[1] Maq. ii, 517, l. 12.
[2] Maq. ii, 158, l. 39; ii, 429, l. 10.
[3] Maq. i, 343, l. 8.
[4] Maq. i, 125, l. 25 and after.
[5] v. Pocock's map.
[6] Descr. xv.
[7] Maq. ii, 127, l. 5; Ibn Khallikân, Wafâyât, ii, 124.
[8] S.D. iv, 58, l. 16.

Josephus, and Eutychius, Mr. Butler comes to the conclusion that the main fact of the existence of such a fortress needs no further question. In addition to the passage of S.D. cited, which is conclusive in corroboration, it may be useful to show how the statements of El Maqrîzî on the subject, at first sight hopelessly conflicting, may be readily explained.

The older name for Er Raṣad was Esh Sharaf (the cliff), and it shared this appellation with two other places in the vicinity of Miṣr and El Qâhirah.[1] Two more places were also known as El Jurf, a name not very far removed from Esh Sharaf, either in meaning or in sound.

El Maqrîzî, in spite of the confusing statements of his predecessors, realized that the ancient Babylonian fortress was not the same as Qaṣr esh Sham', but it is evident that he had not himself identified its remains.[2] He knew that they were on one of the Sharafs, and he places the fortress of Bâblâyûn, once on the Sharaf near the mosque of Zain el 'Âbidîn,[3] and another time on one of the two Jurfs, the one near Maqs,[4] i.e. near the present railway station of Cairo, which he here calls Esh Sharaf.

As a further proof that this is the correct explanation, it may be pointed out that Khiṭṭat el Fârisîyîn, said in one place to be on Jabal Bâblâyûn, which is identified with the Sharaf near Zain el 'Âbidîn,[3] is elsewhere stated to be near Birkat el Ḥabash. Now the Sharaf near Zain el 'Âbidîn was over a mile and a half from that birkah, whereas the Sharaf called Er Raṣad actually overlooked it.

Birkat el Ḥabash. This very large birkah formed the southern boundary of Miṣr and El Qarâfah. It stretched across from the Nile up towards El Muqaṭṭam at Basâtîn el Wazîr. Its limits may be cited.

Qibli. Some of the lands of [a village called] El 'Adwîyah divided from it by a dyke, and some fields of Basâtîn el Wazîr.

[1] Maq. i, 125, l. 21.
[2] Maq. i, 288, l. 1.
[3] Maq. i, 298, l. 10.
[4] Maq. ii, 452, l. 26.

Baḥri. Buildings, the road and a dyke dividing it from Birkat esh Shu'aibîyah.

Sharqî. Basâtîn el Wazîr.

Gharbî. The Nile, lands of Dair et Ṭîn, and part of the lands of Jazîrat es Ṣâbûnî and Jisr Bustân el Ma'shûq.[1]

The north bank of the Birkat "passed south of Er Raṣad"; between the two was a Nestorian Dair.[2]

The Dair may be the building marked Dair in Descr. xv, which is now a powder magazine known as Iṣṭabil 'Antar. Mr. Lane Poole surmises that Iṣṭabil 'Antar is built on the remains of the Babylonian fortress, which was indeed at one end of Er Raṣad, and this may possibly be the case, though we are not told what ground there is for the supposition.

A guide to the line of the north bank of Birkat el Ḥabash is also given by the still existing cistern of an ancient aqueduct.

We have now sketched, as far as we have been able, the boundaries of Fusṭâṭ in the fifteenth century. The boundaries of its inhabited parts at that time may be recapitulated.

North from El Kabbârah to Suwaiqat Nauwâm, which is the line between the former gates of Fusṭâṭ: Bâb Miṣr, or Bâb es Sâḥil, and Bâb es Ṣafa, the old town wall having passed south of Bustân el 'Âlimah to meet Dâr en Nuḥâs.

From Suwaiqat Nauwâm and Kaum el Jârih to Bâb el Qanṭarah and the river bank was the east side, the third and west side of the triangle being the bank of the Nile.

All this appears to have been inhabited in the time of Ibn Duqmâq, with the exception of a few patches of ruin which no Eastern city ever seems to be without.

It is difficult to be certain, because he is very often not at all explicit as to the date of what he mentions; in many instances he appears undoubtedly to speak of things that had disappeared, perhaps centuries before his time, in a way that would lead one at first sight to think that he is speaking from his own observation.

[1] Maq. ii, 153.
[2] Maq. ii, 289, l. 32.

His detail is so minute that he gives enough material for fixing, by cross reference, within fairly approximate limits, the place of nearly all that he speaks of. A few names not referred to specially have been put in the map in this way, and it will be easy to verify these positions from the index to S.D. If he had only given dimensions, in a few cases even, one might reconstruct an accurate plan; but he does not do so. All that can therefore be done is to show roughly the whereabouts of his streets and buildings. Having examined his account very carefully, it can be seen that nearly everything in Fusṭâṭ of which he tells us lay within the area described. There is a little, but very little, mentioned as being to the eastward of the eastern limit which has been assigned for Fusṭâṭ.

By a process which is too long to repeat here in full, it can be shown also that an eastern gate, to which he makes a single reference as the gate from which funerals went out to El Qarâfah, was south-east of Jâmi' 'Amr and, apparently, not far from it.[1]

The town wall to the east is not mentioned, but this gate was probably a limit of the town, dating from the time of the Fatimites' downfall. It is not part of the subject under consideration here to enquire what the extent of Miṣr was before that time.

Between about the time that Ibn Duqmâq wrote (in 793 A.H.) and that of Maqrîzî's writing, about thirty years later, a considerable change had taken place. Zuqâq el Qanâdîl and Khaṭṭ el Muṣâṣah were greatly devastated[2] (in 790 A.H.). A little after that time we read of the demolition of buildings of consequence for the sake of their materials. Fusṭâṭ was then rapidly decaying, and passing into the state at which the French invasion found it.

The whole of the eastern portion of Miṣr was occupied by the enormous cemetery called *El Qarâfah*, bounded as follows:—

[1] Bab Miṣr near Dâr ez Za'frân, latter near Dâr el Jauhar, S.D. iv, 12, l. 5; Zuqâq el Bawâqil between this and Jâmi' Amr, S.D. iv, 16, l. 14, etc., etc.
[2] Maq. i, 339, l. 25.

To the south by Birkat el Ḥabash.[1]

To the west by Miṣr, i.e. El Fusṭâṭ;[2] from this it was separated by a wall, which seems to have been continued till it met the habitations of the north of Miṣr,[3] near Mashhad es Saiyidah Nafîsah.

To the east by El Muqaṭṭam.[4]

To the north by the habitations south of the Citadel, from Bâb el Qarâfah[5] to near Mashhad es Saiyidah Nafîsah.

That part of El Qarâfah which adjoined El Muqaṭṭam was called El Qarâfat el Ṣughra, and that part which was to the east of Miṣr, next to the habitations, was called El Qarâfat el Kubra;[6] an aqueduct built by Ibn Ṭûlûn formed the division between the two.[7]

This aqueduct, known as *Qanâṭir ibn Ṭûlûn*, took its supply from a well called 'Afṣat el Kubra and conveyed water to Darb Sâlim.[8] *Darb Sâlim* is described as "in the beginning of El Qarâfah," near Qabr el Qâḍi Bakkâr.[9]

'Afṣat el Kubra was one of three wells, the two others being 'Afṣat es Ṣughra and Bîr en Na'sh, also called 'Ain Abî Khulaid,[10] which were not far from one another.[11] It was one of the north limits of Birkat el Ḥabash.[12] 'Afṣat es Ṣughra seems to have been near a spur of El Muqaṭṭam which ran out towards Birkat el Ḥabash.[13] At this end of the aqueduct there were Christian and Jewish cemeteries,[14] and remains of the aqueduct were standing in the time of El Maqrîzî.[15]

It is not certain whether the ruined aqueduct marked on our map is the one in question, or whether it is another

[1] Maq. ii, 444, l. 39; 423, l. 35.
[2] Maq. ii, 442, l. 36.
[3] Maq. i, 343, l. 7.
[4] Maq. ii, 442, l. 36; 444, l. 19.
[5] Maq. ii, 444, l. 34.
[6] Maq. ii, 442, l. 36.
[7] Maq. i, 298, l. 18.
[8] S.D. iv, 58, l. 12; Maq. ii, 449, l. 15.
[9] Abûl Maḥâsin, en Nujûm, etc., i, 46, l. 16.
[10] S.D. iv, 58, l. 10.
[11] Maq. ii, 289, l. 34; S.D. iv, 58, l. 10.
[12] Maq. ii, 152, l. 22.
[13] Maq. ii, 460, l. 31.
[14] Maq. ii, 460, l. 31.
[15] Maq. ii, 457, l. 6.

aqueduct which brought water from Birkat el Ḥabash to the Mosque of El Imâm esh Shâfi'î. The latter was built in about 1212 A.D.,[1] the former three and a half centuries earlier, so that it might be possible to decide the question by an examination of the remains. The direction taken by the present aqueduct leads to the conjecture that it is not the older one: there is also an indication given by what can be gathered of Darb Sâlim's position, which is not conclusive either way. If the point could be settled with certainty, our knowledge of the topography of El Qarâfah would be considerably advanced.

In El Qarâfat el Kubra there are now only four or five ruined domes left, and it seems in the time of Maqrîzî to have been long abandoned. Most of the monuments in it which he mentions were even then no longer existing. Out of seventy places, mostly mosques, in El Qarâfah mentioned by El Maqrîzî, we gather from what he says that twenty were existing in his time and twenty were not existing; some, if not nearly all, of the former were in ruins; of the remaining thirty, probably at least half had vanished. Nearly all the buildings stated by Maqrîzî to have been in El Qarâfah belonged to the Fatimite period, there being only two or three mentioned which were founded later than 1300 A.D., and only seven or eight founded before 900 A.D. It may also be remarked that El Qarâfat el Kubra does not seem to have had any important buildings founded in it since 1168 A.D., which is the date of the burning of Miṣr by Shâwar to prevent it falling into the hands of the Crusaders under Almeric.

In considering what can be deduced from our descriptions of the places of the mosques in El Qarâfat el Kubra, one is at once faced with the fact that there are no certain points of departure. The only guides that appear available are the spur running out from the Muqaṭṭam[2] towards Birkat el Ḥabash, marking the approximate position of

[1] Maq. ii, 444, l. 31.

[2] Unfortunately the maps available fail here. This part of El Muqaṭṭam is not represented in the large-scale map of the Egyptian P.W.D.

'Afṣah at the end of Qanâṭir ibn Ṭûlûn, and the east end of Birkat el Ḥabash. Besides this we have the line of these Qanâṭir, about which it may be remarked that, if not identical with the present remains, it appears certain at any rate that they must in this case have lain to the west of them, for had the two aqueducts crossed one another some trace of the point of junction would surely now be visible. Whether the ruins are those of the aqueduct of Ibn Ṭûlûn or Esh Shâfi'î, their starting-point will in either case give a limit to the north shore of Birkat el Ḥabash.

Another very vague guide is a description of the view from Jâmi' el Fîlah on Er Raṣad, and lastly there are a few indications from the accounts of the ancient 'Khiṭṭahs' or settlements. With such slight material it is useless to attempt to do more than to give a very rough position to the places in El Qarâfat el Kubra which seem to have been the most important centres.

These are *Jâmi' el Qarâfah* and *Masjid el Aqdâm*. We have to assume positions for Jâmi' el Fîlah and El Qanâṭir el Ṭûlûnîyah, which we will do, having indicated the probable amount of maximum error. Thence we get a line for the position of Masjid el Aṭfaiḥi, which was a little to the north of west of the conduit of Jâmi' el Fîlah,[1] and another line for the position of Masjid el Aqdâm, near that of the conjectured line of El Qanâṭir et Ṭûlûnîyah, since this aqueduct was originally built for the purpose of bringing water to the Masjid.[2]

Masjid el Aṭfaiḥi was connected by an aqueduct running across the Qarâfah to the Qanâṭir et Ṭûlûnîyah,[3] and this aqueduct passed near Jâmi' el Qarâfah,[4] which can be inferred to have been south of it.[5]

As a further proof that Jâmi' el Qarâfah was in this direction, we may mention that Khiṭaṭ el Ma'âfir, in which it was situated, is described as extending from Er Raṣad to

[1] Maq. ii, 451, l. 15.
[2] Maq. ii, 458.
[3] Maq. ii, 451, l. 22.
[4] Maq. ii, 450, l. 8.
[5] Maq. ii, 451, l. 4.

Siqâyat ibn Ṭûlûn (i.e. 'Afṣat el Kubra); and that Masjid el Aqdâm was not *very* far north seems to follow from its being placed in the same Khiṭṭah.[1] Now Masjid el Aqdâm seems to have been just south of Khiṭṭat Dhi el Kalâ',[2] since Khiṭṭat er Ru'ain adjoined the last named, and there was another Khiṭṭah to the north of Er Ru'ain, viz. Maḍhij.[3]

El Kalâ' and Er Ru'ain are both described as to the east from Er Raṣad, which is of course vague; they also were the site of Masjid el Aṭfaiḥi, therefore probably a little to the north of east. From the above one may locate Jâmi' el Qarâfah within a space about half a mile square, and Masjid el Aqdâm[4] within something like the same distance: doing this one can see that it is not impossible that the southern dome of the ruins now existing in El Qarâfat el Kubra may be one of the group of mosques formerly standing near Jâmi' el Qarâfah. Now 'Ali Basha Mubârak, in his Khiṭaṭ,[5] as far as his description can be followed, identifies Jâmi' el Qarâfah with the remains marked on our map as Sidî Faḍl. He is often rash in his statements and demonstrably wrong, so that his book, which contains a great amount of useful information, unfortunately marred by a great many errors, has to be used with caution. But when he says that the mosque is in a place now known as Haush el Auliyâ he is doubtless correct, and this certainly affords evidence in support of the identification, since Jâmi' el Qarâfah was called Jâmi' el Auliyâ.[6] Of course, the ruin may just as likely be that of one of the mosques near Jâmi' el Qarâfah as that of the Jâmi' itself.

Although *El Qarâfat el Ṣughra* still contains some known monuments mentioned by Maqrîzî, it is quite as difficult to get an idea of the position of the others which he described as it is in the case of El Qarâfat el Kubra. With the

[1] Maq. i, 298, l. 16; ii, 445, l. 17. Khaṭṭ would appear to be a slip.
[2] S.D. iv, 4, l. 24.
[3] S.D. iv, 4, l. 23.
[4] With much less certainty. There seems to be some ground for supposing that it was in Khaulân, much further north.
[5] Part iv, p. 63.
[6] Maq. ii, 451, l. 12.

exception of one or two which follow some known place directly, e.g., Jâmi' ibn 'Abd ez Ẓâhir, south of the tomb of El Laith,[1] and the Khângâh of Buktumur,[2] the ruins of which may be looked for right in the south on the fringe of the mountain next Birkat el Ḥabash, it seems almost impossible to fix anything, however vaguely.

One may mention El Buq'ah as containing five or six mosques in a group, but all that can be said is that it was somewhere on the east edge of El Qarâfat el Kubra, not far to the north from its connection with El Ma'âfir; and lastly one may guess that El Buq'ah, as it contained the tomb of 'Âmir, was near that of his son 'Uqbah. The position assigned is of course very doubtful. We read of a mosque in the hollow (*baṭḥâ*) of Masjid el Aqdâm,[3] so that it seems either that Masjid el Aqdâm was itself in a hollow or that there was a hollow close to it.

Proceeding to the north, it may be noticed that the tomb of Es Sâdat eth Tha'âlibah does not appear to be mentioned by Maqrîzî. Jâmi' el Wazîr Shâhîn[4] would doubtless have been built too late for him to record. Out of a considerable number of Mamluke tombs close to Bâb el Qarâfah which were, some of them, apparently of a sufficiently early period, Khângâh Qauṣûn[5] and Turbat Khwand Ardautikîn[6] seem to be the only ones which are noticed. Whether the latter still exists is not known to us, but the passage relating to Khângâh Qauṣûn seems sufficient to show that Bâb el Qarâfah was in about, if not exactly, the same place as now.

Mashhad es Saiyidah Nafîsah was, at one time, in Khaṭṭ Darb es Sibâ',[7] and near Darb es Sibâ' was El Muṣalla el Qadîm.[8] The Muṣalla had disappeared, but on its site was a mound "overlooking the tomb of El Qâḍi Bakkâr."[9] This

[1] Maq. ii, 324, l. 18.
[2] Maq. ii, 423, l. 35.
[3] Maq. ii, 448, l. 13.
[4] Khalîl b. Shâhîn, vizier 1436 A.D.: Suyûṭî, Ḥusn el Muḥaḍarah, ii, 171.
[5] Maq. ii, 308, l. 17.
[6] Maq. ii, 119, l. 39.
[7] Maq. ii, 441, l. 31.
[8] S.D. iv, 125, l. 24.
[9] Maq. i, 305, l. 4.

tomb is often spoken of and seems to have been existing. It has been pointed out above that it was near Darb Sâlim. The space between Mashhad es Saiyidah Nafîsah and Kaum el Jâriḥ, once inhabited and once afterwards turned into gardens, was then waste and empty as it is now. El Maṣnâʿ el Kharâb,[1] which is alluded to several times, seems to have been near and to the north of Kaum el Jâriḥ.

There would seem to have been a wall between El Qarâfah and Miṣr reaching from about the Mashhad es Saiyidah Nafîsah southwards to Kaum el Jâriḥ,[2] and containing a gate called Bâb el Mujaddam,[3] which is spoken of two or three times.

With regard to what lay along the north of Miṣr, the fringe of Cairo proper, which already had stretched down there in the time of Maqrîzî, occupied just about the same area as is inhabited at this day.

In fact, the streets would seem to have been the same at that time as now exist. For instance, we find Khaṭṭ el Kabsh[4] the present Shâriʿ Qalʿat el Kabsh; Khaṭṭ el Jâmiʿ et Ṭûlûnî,[4] possibly north of the mosque on the Ṣalîbah,[5] probably south, the present Shâriʿ Darb el Ḥuṣr; Khaṭṭ Bîr el Waṭâwîṭ,[6] the present Shâriʿ Bîr el Waṭâwîṭ; Khaṭṭ el Mashhad en Nafîsî,[7] part of the Shâriʿ or principal street of Cairo, which extended to Kaum el Jâriḥ, etc.[8]; Khaṭṭ el Qubaibât,[9] probably now Shâriʿ el Baqlî and Khaṭṭ Bâb el Qarâfah.[10] Without being able to determine precisely each one of the above streets, one can gather enough from their names to be sure that the ground was covered.

The space under the Citadel now called Maidân Muḥammad ʿAli was then Maidân el Qalʿah,[11] or El Maidân es Sulṭâni, and

[1] S.D. iv, 28, l. 15.
[2] Maq. i, 343, l. 8.
[3] Maq. ii, 265, l. 14; i, 304, ll. 16, 27.
[4] Maq. ii, 110, l. 21.
[5] Maq. ii, 135, l. 8.
[6] Maq. ii, 74, l. 6.
[7] Maq. ii, 110, l. 35.
[8] Maq. ii, 110, l. 35.
[9] Maq. ii, 136, l. 11; i, 343, l. 26.
[10] Maq. ii, 110, l. 33.
[11] Maq. ii, 228, l. 38.

one of the Zâwiyahs which it contained, that of Rajab,[1] may be noticed, for it seems likely that its position is preserved by the present 'Atfat Rajab, since it was from near it that the aqueduct, which may be the same as the present one, as we have already surmised, conveyed water to the Iṣṭabil of the Citadel.[2]

[1] Gâma' Rajab Tchalabî, Descr. xxvi, sect. ii, 69.

[2] Maq. ii, 230, l. 3. 'Ali Bâsha Mubârak identifies this Zâwiyat Taqî ed Dîn Rajab with Takîyat Taqî ed Dîn el 'Ajami in Darb el Labbânah, a little to the north of the Citadel. It hardly seems that this can be right, v. Khiṭaṭ, pt. vi, pp. 23, 54; pt. ii, p. 104.

MIṢR
in the 15th century
(800 A.H.).
Red ink denotes what is now existing.
Black ink refers to a former period.
SCALE
METRES
EL ARID
EL QARAFAT ES SUGHRA
KHITTAT EL KAFIR
BIRKAT EL HABASH
ISLAND OF RAUDAH
RIVER NILE

CORRESPONDENCE.

1. Travels of Pedro Teixeira.

Camp Khwaja Ahmad of Sistan.
June 15, 1903.

I have read with great interest the review on the Travels of Pedro Teixeira in the J.R.A.S. for April last, and the book in question has itself formed part of the small library which I have with me in camp. At p. 188 it is stated that Malik Turan Shah (of Hurmuz) died in A.H. 779 (1378 A.D.), and that he was succeeded in turn by his three sons; the last of whom is called Salgor Xá (Salgur Shah), "in whose time arose in Persia the Suphy Hhalila, of whom we have spoken in the narrative of the Kings of Persia."

This is on page 189. On the following page we are given some details of the invasion of the territories belonging to Salgur Shah (Appendix A).

I give a translation of the account preserved by Sharaf ud din Ali Yazdi, in the Zafarnamah, of the expedition sent by Timur from Shiraz, under the immediate command of his grandson, Prince Muhammad Sultan, to Hurmuz to bring the districts along the coast into subjection to him.

There seems to be a general resemblance between the account taken from the Zafarnamah and that given in Pedro Teixeira's Travels. Timur's expedition took place

in 798 A.H. Turan Shah, from whose account Pedro Teixeira abridged his, and rendered it into Portuguese, died in 779 A.H., so that a period of 19 years intervened between the two events. This period was filled by two full reigns of two princes, Massa'ud and Shihab ud din, and the third Salgur Shah was reigning when his territories were overrun by the invader. There is nothing improbable in this somewhat short period of time being shared by three rulers, or two rulers and a few years (or less) of the reign of the third. And the fact that brother succeeded brother makes it less improbable, as very few years would intervene between their respective ages; and the lack of direct descendants capable of succeeding to the throne argues a period of strife and the decadence of the family of the Princes. The resemblance of the account given in the Travels of Pedro Teixeira on p. 190 in the first and second paragraph to the account given in the Zafarnamah is the point to which I have alluded. The latter can speak for itself:—

"During the period of the five years campaign it has been stated that Amirzáda Muḥammad Sultan, in accordance with the mandate of His Highness, the Lord of Exalted Fortune, had proceeded towards Hurmuz accompanied by a body of officers of high rank.

"The following is the account of this occurrence. When the Prince had set out from Śhiráz, he and his commanders after deliberation agreed upon the (various) routes to be followed by their divisions.

"The Prince himself marched by way of Dárábjird and Tarim.

. . . . .

"Prince Rustam, son of 'Umr Sheikh Mirza, who commanded the right division of the army in conjunction with Amir Shah Malik, marched to the sea coast by way of Kárzin and Fál. Amir Jallal Hamid, Arghun Shah Akhtáji, Bayán Timur and Begijik, Jattah, advanced by the route of Jahrum and Lár. On the left flank of the Prince's own Command, Idiku Birlás set out from Kirmán, and having overrun Kech and Makran, obtained much

booty. In this way each division having explored the country they traversed, route by route, they overran and plundered any district where the ruler or the inhabitants were found to be not submissive.

. . . . . .

"And when the country around ancient Hurmuz was reached, the troops captured and destroyed the seven fortresses of which the district was famed. First of all, they took the stronghold of Tauq-i-Zindán. Hurrying on, they captured and destroyed the fortress of Koshakak. From this place they advanced against the castle of Śhámil, and, having stormed it, rased it to the ground. Then having arrived at ancient Hurmuz, they took the Fortress of Mīnā and set fire to it; after which the holds of Minujan, Tarzak, and of Tazián were captured and rendered desolate.

'From awe of the armies of the Most Fortunate Monarch of the Age,
Dread seized the seven celestial spheres of the Heavens.
How then could reliance be placed on Hurmuz and its seven fortresses
When that army advanced against them in its might?'

"In short, Muḥammad Shah, the Malik of Hurmuz, who like a fish had made the waters of the ocean his safeguard; and like an eclipse had concealed his face in the rocky islet of Jerun, with the mantle of helplessness . . . . sought for quarter. He sent presents of great value and rarities of the sea, and accepted the terms imposed upon him with reference to tribute and political subservience.

'When the Prince of Hurmuz saw that conflagration,
It drew the damp of the ocean into his soul (liver).
He was terrified lest that ocean-emptying monarch,
Like another Moses, should part the waves of the sea:
For if each soldier were only to bring his two hands full of stones and earth,
That narrow strait would by these means be filled completely up.

Not only would the waters of Oman prove an insignificant obstacle,
But they would pass on, and assail the very constellations of Heaven itself.
Therefore, did he not merely enter the portals of submission,
But performed the part duly with offerings of silver and gold.'

. . . . .

"The annual tribute had been fixed at 300,000 dinars; but for a space of four years he had paid no one a penny of it. He now agreed to make good arrears for those four years; and to liquidate a portion of that obligation, he forthwith despatched ready money, pearls, and fabrics of value, while with respect to the balance he promised to make arrangements to raise the amount and to forward it when ready."

The name of the ruler is given in the foregoing account as Muḥammad Shah, as against Salgur Shah in Teixeira. But the latter might have been merely a *title*, while the other was his real name.

There was a "Mahamud Xá" mentioned on page 193. But as he was one of the puppet-kings of Hurmuz, had this expedition of Prince Muḥammad Sultan taken place in his time, the latter would have been in collision with the Portuguese, to say nothing of the difference of dates, which renders such a supposition impossible. The histories of the very minor dynasties, such as the Maliks of Hurmuz and of Sistan, and others, were very incomplete, and names and dates are inserted without much care and attention to their position relatively; names especially are frequently transposed.

Reading the two accounts, I was struck with the resemblance between the account of the subjugation of Hurmuz by Timur's arms, and the trouble alluded to in the Hakluyt Society publication as being due to the rise of the "Sophy Hhalila," and I venture to draw attention to it in case it may interest anyone else.

C. Tate, Survey of India.

2. Tibetan MSS. in the Stein Collection.

London.
August 17th, 1903.

Dear Professor Rhys Davids,—I am much indebted to Dr. Rockhill for the friendly remarks which he has made in the July number of the Journal anent my "Preliminary Notice" of the Stein Tibetan MSS. His chief arguments, however, if he will allow me to say so, seem to indicate some misapprehensions, which, with your permission, I will endeavour to remove.

Firstly, we have an archæological issue. My statement that "the conditions under which the fragments were discovered were such as to make it practically impossible to date them later than the eighth century, and the evidence of a Chinese sgraffito has since proved this conclusion to be right" was written after consultation with Dr. Stein himself. It expresses the views since set forth by the latter scholar in his newly published "Sand-Buried Ruins of Khotan" (Introduction, p. xix, and ch. xxvii). The Chinese sgraffito on the wall of the ruined temple of Endere, as read by Professor Chavannes and other Sinologists, gives as date 719 or 791 A.D., the earlier date being apparently the more probable; and Dr. Stein, speaking as an archæological expert from observation on the spot and on the basis of wide experience elsewhere, decides that "the date when this Chinese sgraffito was scratched into the wall could not have preceded by many years the deposition of the various votive manuscripts," and that "this consideration (the nature of the plaster) fixes the second half of the eighth century as the latest possible time for the production of the Tibetan . . . manuscripts" (p. 419). These judgments, passed after critical study of all archæological evidence obtainable during the excavations and subsequently, will, I hope, convey assurance to Dr. Rockhill on the archæological issue.

The second issue is purely philological. I wrote that "the most novel and interesting feature in the spelling of

the Śālistamba is the presence of a final *-d* at the end of most of the roots which terminate in *-r*, *-l*, or *-n*," and "another singular feature is the presence of *y* between *m* and the high vowels *i* and *e*." Apparently my words were open to misconstruction. Dr. Rockhill considers the *-d* as a sporadic blunder in spelling; but as a matter of fact its presence is regular in the Śālistamba MS., with only isolated exceptions. Now I submit that when a carefully written MS., of which nearly a half survives, presents such forms as these with *-d* not in isolated examples but by the dozen,[1] with only exceptional deviations,[2] the laws of text-criticism and philology alike compel us to accept them as either genuine archaisms or genuine dialectal phenomena.

Thus my theory that "the final *-d* was beginning to be dropped in conversation, and was only preserved by literary tradition" still stands where it did; and the *Do-ring* inscription quoted by Dr. Rockhill incidentally confirms it. The Śālistamba MS., as I have said, keeps the literary tradition (whether national or local I do not pretend to say) by generally writing *-d* after certain roots; among the other Stein MSS., one instance (*sgrold*) appears in a carelessly written copy of two poems, and the vulgar sgraffiti on the walls of the Endere temple, so far as they have been deciphered, have also but one example (*'t'sald pai*); and lastly in the *Do-ring* inscription of the ninth century it is entirely absent, precisely as one would expect. Plainly we have before us the gradual decay of a genuine form.

Again, it is to be noted that the final *-d*, though regularly kept by numerous roots in the Śālistamba MS., is never under any circumstances found in a large number of other roots, as I pointed out. This fact surely disposes of Dr. Rockhill's theory that it is a mere "fault in spelling"; and it likewise debars us from supposing that the *-d* was in origin a euphonic development, and that from this use it came later to be generalised; for why should it then be restricted rigidly to certain roots?

[1] One page, for instance, has ten instances.

[2] Dr. Rockhill wrongs the scribe in charging him with having written *stsalr*; the MS. has plainly *stsald*.

The insertion of *y* after *m* before *i* and *e* is another case in which I regret that I cannot accept Dr. Rockhill's view. It appears throughout in the Stein MSS. and sgraffiti; and, as Dr. Rockhill remarks, it occurs on the *Do-ring* too. Dr. Rockhill suggests that this insertion of *y* is "an attempt, since abandoned, to differentiate, in certain cases, words with nearly the same sound"; thus *mye* 'fire,' but *me t'og* 'flower.' If I rightly understand Dr. Rockhill, he means that a word with two meanings received a *y* in one case and not in another. Let the facts decide on this theory. *Mi*, occurring in the two meanings 'not' and 'man,' is in either case spelt *myi*; and so with other words. Dr. Rockhill's theory equally breaks down before words like *med*, *rmi*, *smin*, which have only one meaning apiece, and yet are invariably written in the Stein MSS. as *myed*, *rmyi*, *smyind*. In view of these facts I must still adhere to my former opinions; and I venture to think that Dr. Rockhill would agree with me if he had been able to apply his learning to a study of the MSS. as a whole, as I hope he will do when they will be published in Dr. Stein's "Detailed Report."—Very sincerely yours,

L. D. BARNETT.

3. CUP-MARKS AS AN ARCHAIC FORM OF INSCRIPTION.

DEAR PROFESSOR RHYS DAVIDS, — Reading Mr. Rivett-Carnac's article on the above subject in the July number of this Journal reminded me of similar cup-marks which I discovered eighteen years ago in the 'Isā Ṣomālī Country.

I mentioned the matter at a meeting of the Royal Geographical Society in 1885; but neither the late Sir Richard Burton nor anyone else present at the meeting could suggest any explanation of the marks.

I also alluded to this in a letter to you, published in the R.A.S. Journal, April, 1898. To save the trouble of reference, I quote the paragraph:—

"Whatever be the origin of the Ṣomālī race, it is certain that their country, or at least the extreme western portion,

was at some remote period occupied by a Christian race; for in the year 1885 I discovered, at a place near the coast, and about half-way between Zayla and Rās Jibūtī, traces of substantial stone buildings and numerous graves marked by well-cut stone crosses three or four feet high; and on each cross were cut a number of circular concave marks about two or three inches in diameter, and arranged in straight lines; sometimes two parallel rows. What the meaning of these is I am unable to imagine. In the immediate neighbourhood were many large mounds of sea-shells, indicating that the ancient inhabitants had subsisted largely on shellfish."—Yours faithfully,

J. Stuart King, *Major.*

15, *Clarendon Road, Southsea.*
29th July, 1903.

4. Where was Malwa?

Dear Professor Rhys Davids,—With reference to the footnote (*ante*, p. 561) in my paper on "Some Problems of Ancient Indian History," Dr. Grierson and Mr. Irvine (independently of each other) have kindly written to me to point out that there is a tract in the Panjab called Malwa. They refer me to the "Gazetteer of the Himalayan Districts," vol. ii, p. 359, and J. D. Cuningham's "History of the Sikhs," p. 853. I admit my error, but it does not affect the argument in my paper. The Malwa of the Panjab lies in the wrong direction. The Malwa of the account with which my paper is concerned must obviously lie to the south or south-east of Thanesar. For this reason I am still disposed to think that probably Bühler had the Malwa of the Fatehpur District in his mind. The same consideration would seem to have guided the translators of the Harsha Charita in their remark on page xii.

A. F. Rudolf Hoernle.

Oxford, August 25th, 1903.

5. Sanskrit Imperatives.

Dear Professor Rhys Davids,—Last year I pointed out in the J.R.A.S. that the "benedictive imperative" *avatāt* in the opening stanza of the Bimbamāna was a good instance of Pāṇini's rule (vii, i, 35), which Whitney treats as a grammarian's figment. Some scholars seem inclined to question the validity of the instance. I therefore have put together a few cases of this "benedictive imperative" that I have noticed in cursory reading of ancient authors. Were I to set out with the deliberate purpose of collecting examples, I believe I could soon find hundreds. But the following suffice: Hariśchandra, *Jīvaṃdhara-champū*, verse 1, *so 'vatāt*; *Bhaktiśataka*, verse 1, *jayatāt*; Vādībhasiṃha, *Gadyachintāmaṇi*, i, 4, *kurutāt*; Somadeva, *Yaśastilaka*, i, 10, *jayatāt*; *Kāvyaprakāśa*, x, 118, *avatāt*.

The Sūryaśataka will supply examples in almost every verse; e.g., *stāt* 5, 16, 21, 27, *upanayatāt* 26, *avatāt* 30, *apaharatāt* 31. Compare too Speyer, S.S., § 350, and *Syntax* (in the *Grundriss*), § 192.

South-Indian writers of the nineteenth century are particularly fond of the form. In short, it may be said to be characteristic of the literature of the Dekhan, but is certainly not limited to them.

L. D. Barnett.

6. Metrical Prose in Indian Literature.

Professor Hopkins in "The Great Epic of India" (pages 266 ff.) discusses this curious phenomenon as found in the Mahā Bhārata. There are some striking instances of this mode of composition in the earlier literature.

In Dīgha ii, 151, just before the verses inserted in the prose account of the Subhadda episode, the last few lines of the prose consist of words so arranged that they contain half verses, and a very slight alteration would make them read as consecutive verses. In the note to my translation of

the passage,[1] one such possible alteration has already been suggested.

So at Dīgha ii, 209, just after the two lines of verse in § 15 there follows a prose passage which is almost, but not quite, verse. And in Vinaya i, 42, the words *gambhīre . . . . upadhi-saṃkhaye* (at end of § 3) can be made, with a little pressure, into an awkward sloka, and there are two half slokas in the following words.

Professor Oldenberg, in his note on the last passage,[2] suggests that it may have been originally composed in verse in some dialect allied to Pali, and has become prose in the process of transliteration into, or restatement in, Pali.

I cannot but think this a very happy suggestion. Professor Hopkins sees, however, in this curious anomaly a very early form of popular verse, "an instrument of the perpetual story-teller, a naïve form, running in and out of verse like the rhymes in fairy tales." But the "running in and out of verse" is a frequent occurrence. What we have here are phrases which are by no means naïve and popular, but on the other hand ungainly and awkward either as prose or as verse, and leading to a grammatical construction that is the reverse both of the naïve and of the popular. It seems more probable that we have in the Mahā Bhārata metrical prose a result of the recasting into Sanskrit of a narrative once told in the living speech, that is in the dialects, in which the old popular ballads out of which the epics arose were most probably at first recited or sung.

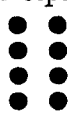
In any case no explanation can be considered satisfactory unless it is sufficient to explain both the sets of facts,—in the Pitakas and in the Epics.

T. W. Rhys Davids.

[1] "Buddhist Suttas" (1881), p. 107.
[2] "Vinaya Texts" (1881), vol. i, p. 149.

7. Note on Mr. J. H. Rivett-Carnac's Article on "Cup-Marks."

It may be pure coincidence and nothing more, but in reading Mr. Rivett-Carnac's paper in the July number of the Journal on "Cup-marks as an Archaic Form of Inscription," I have been struck by the way in which a portion of his evidence suggests the mode of divination called *Raml* or Geomancy. The passages I refer to are:—"The necessary changes are gone through, till they form the figures pertaining to heaven and earth" (p. 528, l. 28), and "The emblems of all things under the sky are fixed" (id. l. 31). Again (p. 529, l. 8), "The short or long line, dot or dash," and (id. l. 10) "As the heavens are above the earth, the heavenly objects would be on the highest row"; (id. l. 14) "Below, on the earth, so to speak"; (id. l. 20) "According to their place on a row followed fire and water"; "The father and mother, and their countless progeny" (id., line two from foot). Lastly, on Plate III, the lines and dots in Fuh-he's Triagrams.

Eastern writers on *Raml* open usually with recounting the tradition that when the sons of Adam had become many and had scattered far and wide, he desired some mode of communicating with them. To meet his wishes God sent to him the angel Gabriel. Some say that the messenger made four marks in the sand (*raml*) with the points of his wings. But the commoner version is that he stooped and made in the sand four impressions (*quasi*, 'cups') with the points of his four fingers, thus: and commanded Adam to make four corresponding marks opposite to them, the result being thus: 

These are the first two Figures (*shakl*, plural *ashkāl*), the one called "Mode" (*ṭarīq*) and the other "Congregation"

(*jamā'at*); from these by permutation the other fourteen Figures (*ashkāl*) are derived. The four elements are assigned to these dots or marks in the following order:

1st, Fire, ●
2nd, Air, ●
3rd, Water, ●
4th, Earth, ●

Fire (or the first line) is held to be greater than Air (the second line), and so on.

In writing out the solution of a problem the first four Figures are called by European writers the Mothers, four others derived from them are the Daughters, four derived from the Daughters are the Nephews (or rather Grandsons), then follow two Witnesses, and last of all the Judge. In the books published in the East the even numbers (*juft*) are shown by a line, and odd numbers (*fard*) by dots; in European works on the subject circles are used throughout, thus ○.

"Mode" (*ṭarīq*) is styled in the East the Father, and "Congregation" (*jamā'at*) the Mother of *Raml*.

From these two Figures (*ashkāl*) others are born. The permutations of the two original Figures are eight in number, thus:

4	3	2	1	Mode.	Congregation.	1	2	3	4
●	●	●	—	●	—	●	—	—	—
●	●	—	●	●	—	—	●	—	—
●	—	●	●	●	—	—	—	●	—
—	●	●	●	●	—	—	—	—	●

From the two original Figures six others are constructed, bringing the total number of Figures to sixteen.

To these Figures are assigned the planets, the days of the week, and the quarters of the compass. In addition, to each of them are attributed many qualities and powers. By this machinery the geomancer professes to be able to predict what will happen under any problem propounded to him. Divination in this method is still a living thing in the East, works on it are constantly issuing from the Indian press; and it is not altogether dead even in England. There were professors of it at Bristol as late as 1818, the first Lord Lytton believed in and practised it, and a treatise on it was published in London only fourteen years ago.

WILLIAM IRVINE.

18*th July*, 1903.

8. THE SAHASRĀM, RŪPNĀTH, ETC., EDICT OF AŚŌKA.

DEAR PROFESSOR RHYS DAVIDS,—As you know, I have had under consideration the Sahasrām, Rūpnāth, etc., edict of Aśōka. And I have arrived at the real meaning of it.

The edict is dated, not only in the 256th year (expired) after the death of Buddha, but also "somewhat more than *thirty-eight* years" after the *abhishēka* of Aśōka.

One result is obvious at once: 256—38=218; and the record thus endorses, and carries back to the time of Aśōka, the Southern tradition as to the number of years that elapsed from the death of Buddha to the *abhishēka* of Aśōka.

But I further gather from this record that, early in the thirty-third year after his *abhishēka*, Aśōka abdicated, and went to spend the remainder of his days in religious retirement; and that this edict was a valedictory address, issued by him when he felt that his end was near.

As my article on the subject cannot be issued in the October number of the Journal, then perhaps you will kindly find room for this announcement.—Yours sincerely,

J. F. FLEET.

23*rd August*, 1903.

9. Notes on Harṣa-Carita Verse 18, and on Verse Quotations by Aśoka.

Dear Professor Rhys Davids,—I venture to submit to you two brief notes.

1. The difficulty in verse No. 18 at the commencement of the *Harṣa-Carita*—

आढ्यराजकृतोत्साहैर्हृदयस्थैः स्मृतैरपि ।
जिह्वान्तः क्षपमाणेव न कवित्वे प्रवर्त्तते ॥

"By the achievements of Āḍhyarāja, which, though remembered, abide in my heart, my tongue being drawn inward does not go forward in poetry"—

has been considerably lightened by Professor Pischel, who has convincingly proved (*Nachrichten d. k. Gesellschaft d. Wissenschaften zu Göttingen, Phil.-hist. Klasse*, 1901, *Heft* 4) that by *Āḍhyarāja* Harṣa himself is meant. But I have always been troubled by the *api*, 'though,' which seemed to imply that, being remembered, the achievements would not naturally be in Bāṇa's heart. The same difficulty was no doubt felt by the commentator, who therefore proposed to explain *api* as meaning 'also,' quoting Pāṇini, I, iv, 96, अपिः °समुच्चये°. He suggests further a second interpretation, according to which the *utsāhas* were in the heart, not of the author, but of Āḍhyarāja.

I have always thought that there might be a reference to some psychological doctrine, according to which memory did not reside in the heart. This seems to be confirmed by a verse in the *Prabodhacandrodaya* (ed. Brockhaus, p. 41):

स्मर्य्यते स हि वामोरु यो भवेद्धृदयाद्बहिः ।
मच्चित्तभित्तौ भवती शालभञ्जीव राजते ॥

"He is remembered, lady, who should be without the heart. On the wall of my mind you stand out like a figure in relief."

I have not, however, been able to trace this doctrine anywhere in the darśanas. The Sāṅkhya makes memory a property of the *buddhi*, while according to the Nyāya it is

संस्कारमात्रजन्यं ज्ञानं. The latter, however, means only that it is produced without *indriyasambandha*, 'sense contact,' and has nothing to do with psychophysical views.

2. Verse quotations in the edicts of Aśoka? As most of the later Indian inscriptions either are composed in verse or quote verses, and the same is true in general of the written literature, it would not be surprising to find Aśoka himself adopting this usage. The following suggestions may therefore perhaps be considered by scholars more immediately preoccupied with the earliest Buddhist literature.

Aśoka constantly expresses a wish to secure the happiness of men in this world and the next. Thus we have the following expressions:—[1]

kiṃti hidataṃ ca pālataṃ ca ālādhayevū ti.
Pillar Edict IV.

kimaṃ kāni sukhaṃ avahāmī ti. *Id. VI.*

hevaṃ hi anupaṭīpajaṃtaṃ hidata[pāla]te āladhe hoti. *Id. VII.*

so tathā karu ilokacasa āradho hoti parata ca aṃnaṃtaṃ puṃnaṃ bhavati. *Rock Edict XI.*

hidaloka palalokaṃ ca ālādhayevū.
Separate Edicts, Dhauli, ii, 6; cf. ii, 3, and i, 6.

A common phrase in this connection is *svargam ārādhay-*, 'to win heaven,' which occurs in the *Separate Edicts*, Dhauli, i, 16–17; ii, 9 (with the corresponding passages from Jaugada), and in the Sahasrām-Rūpnāth-Bairāt-Brahmagiri edicts, in the *Fourteen Edicts*, ix. We also find in a number of places the nominal phrase *svargārādhi* or *svargasya ārādhi*. It is quite clear that the expression was (at any rate with Aśoka) a common turn.

In the sixth of the *Fourteen Edicts* the phrase runs, according to the Girnar version, as follows:—

"Ya ca kiṃci parākramāmi ahaṃ, kiṃti bhūtānaṃ ānaṃṇaṃ gacheyaṃ idha ca nāni sukhāpayāmi paratrā ca svagaṃ ārādhayaṃtu."

[1] I quote according to Bühler's recent texts in *Epigraphia Indica*, ii–iii, so far as they extend; elsewhere from M. Senart's work.

The other versions present slight variations, as *vracheyaṃ, sha* (for *nāni*), *sukhayami, aradhetu*, and omission of *ahaṃ* (Shāhbāzgarhī), *yehaṃ, sha* (for *nāni*), *sukhayami, aradhetu* (Mansehra), *kāni, yehaṃ, sukhāyāmi, ālādhayitu* (Kālsī), *yehaṃ, kāni, sukhayāmi, ālādhayaṃtu* (Dhauli and Jaugada).

It is to be observed that not only the second half of this passage, *idha ca . . . . ārādhayaṃtu*, is really a standing phrase, as we have seen, but the same is true of the first part also. Thus, parallel to *ya ca kiṃci parākramāmi ahaṃ* we have *yaṃ tu kiṃci parākramate devānaṃ Priyadasi rājā* (Edict X), and parallel to *ānaṃṇaṃ gacheyaṃ* the *ānaniyam ehatha* which occurs in the *Separate Edicts*, i and ii, of Dhauli and Jaugada, in the immediate neighbourhood of *svargam ārādhay-* (*ānaneyaṃ esatha svagaṃ ca ālādhayisathā*, Dh. i, 16–17; ii, 9 =J. i, 9; ii, 13).

Under these circumstances is it not striking to note that the passage in question can quite easily be made to fall into four lines of ten syllables each—

yaṃ cāhaṃ (*or* c'ahaṃ) kiṃci parākramāmi
kiṃti bhūtānaṃ ānaṃṇaṃ ehaṃ,
idha ca yāni sukhāpayāmi
pāratra sva(r)gaṃ ārādhayevu—

with but slight irregularity of metre? Such a verse might come from a poem expressing the aspirations of the Buddha, from such a *praṇidhāna*, for instance, as we find in the (northern) *Bhadracarīpraṇidhāna*, which is written in a somewhat similar metre. I may quote (from the MS. of the Royal Asiatic Society) v. 15 :—

– ⏑⏑ – ⏑⏑ – ⏑⏑ – –
yāvătă kēcĭd dăśa dĭśĭ sattvās
te sukhitāḥ sada bhontu arogyāḥ |
sarvajagasya[ca] dhārmika artho
bhotu pradakṣiṇa ṛścatu āśāḥ ||

Could not such a verse come from the very *Munigāthāḥ* which Aśoka mentions in the Bhabra Edict?

Might we perhaps in a similar way account for the expression about the faith "increasing at least in the ratio of

one and one-half," which occurs as part of a quoted '*savana*' or 'sermon' in the Sahasrām-Rūpnāth-Bairāt-Brahmagiri edicts? Professor Oldenberg has commented (Z.D.M.G., xxxv, p. 475) on the strangeness of such an expression, but it might be defended as proverbial if occurring in a verse. I must confess, however, that the following is a rather irregular anuṣṭubh :—

iyaṃ cāṭhe vaḍhisiti vipulaṃ ca vaḍhisiti |
diyāḍhyam { avarārdhyena / avaradhiyā } diyāḍhiyaṃ vaḍhisiti ||

But the feeling of the expression is metrical.[1]

Iti vijñāpite śiṣṭāḥ pramāṇaṃ.

Yours faithfully,

September, 1903. F. W. THOMAS.

10. ELOHĒ HAŠĀMAĪM IS DEVÁ.

Oxford, August 15th, 1903.

DEAR MR. EDITOR,—Will you allow me to record my suggestion as to—

אֱלֹהֵי הַשָּׁמַיִם (יְהוָה)

in 2 Chronicles xxxvi, 23 (see also Ezra).

I find the name to be Exilic and to mean 'devá.' The 'God of Heaven' is the 'Heaven-God,' as is the Indian word, which is of course 'the shining one' from the sky (originally Iranian also).

The item, if tenable, has a double application. It assists us in verifying the authenticity of the Edict (see also the Cyrus Vase-Inscription, which speaks of the rebuilding of the Temple-city Eššakil (so spelt from memory)). If the Heaven-God is Devá, then the Edict looks the more native to its asserted place of origin.

But, second, it introduces a valuable item into the discussion of the theology of the Inscriptions of Cyrus's

[1] I must express my acknowledgment to Dr. Fleet, through whom I became acquainted with this passage (see his note above).

(not immediate) successor Darius, and of the other Achæmenians. The absence of 'devá' in any of its forms, and the use of 'baga' for 'god' in these last (sculptures), coincide with the very striking inversion, or perversion, of the (otherwise) Indogermanic name for God, which (perversion) is so very prominent in the Avesta and in all (?) later Persian literature. There (in this Persian lore), as some unaccustomed readers may need to be reminded, it is the name for 'demon,' as against all (?) non-Iranian Indogermanic usage; yet recall the vulgarism 'Deuce.'[1]

But if the absence of devá from the Behistūn Inscriptions points to this perversion of the term in Iran, this perversion may be *only in the course of development* there upon the Darius Inscriptions; that is to say, if C. and D. had no reluctance in using its equivalent 'Heaven-God' in the recorded Edicts. Not so certainly would this be true of the later successors of Darius, whose inscriptions likewise avoid 'devá.' The farther they were separated by time from Cyrus, the more significant their disuse of the word becomes as agreeing with the later perversion. Notice that Cyrus's Edict uses 'Heaven-God' of Yahveh; see also the devout expressions everywhere upon all the Achæmenian Inscriptions which so closely resemble the related scriptural passages.—Yours, etc.,

L. H. Mills.

11. Ignazio Danti and his Maps.

To the Editor of the Journal of the Royal Asiatic Society.

Sir,—In connection with Mr. Beveridge's letter on this subject in the July number, it may be of interest to mention that Professor G. Uzielli refers at some length to Danti's geographical and other work in the course of a discussion on the Toscanelli-Columbus correspondence in the *Bolletino* of the Italian Geographical Society for 1889, giving besides references to other Italian works which treat fully of Danti's

[1] Or is Deuce not 'Zeus,' but Iranian 'Deva(s)'?

career; while a facsimile reproduction of his map of Perugia, drawn in 1577, appears in the same journal for April-May last, accompanied by letterpress by Professor A. Bellucci. M. Thomassy also, in his "Papes Géographes," published in 1852–53 in the *Nouvelles Annales des Voyages*, described the maps painted on the walls of the 'Logge di Raffaelo' in the Vatican, in part the work of Ignazio Danti, who at the time of their execution was cosmographer to Pope Gregory XIII. Both Uzielli and Thomassy refer to their intention of recurring elsewhere to the subject of Danti and his work, but I have been unable to find whether the intention was ever carried out. Notices of the padre are to be found in various biographical dictionaries, besides the "Biographie Universelle," though less attention has been paid to him by modern writers on historical geography than to many of his contemporaries. He is not mentioned, e.g., by Nordenskiöld in his "Facsimile Atlas" or "Periplus," nor by Uzielli in his section of the "Studi Bibliografici e Biografici," published by the Italian Geographical Society on the occasion of the Second and Third International Geographical Congresses; while Marinelli's "Geografia dei Padri della Chiesa" deals principally with geographical speculations of an earlier date. It is to be remarked, however, that Danti's work as a cartographer does not seem to compare, for originality, with that of other Italian geographers of his time, Gastaldi for instance. The great resemblance of the Vatican maps to those in Ruscelli's Italian version of Ptolemy (themselves largely copied from Gastaldi's in the first Italian edition of 1548) was pointed out by Thomassy, while as regards the mapping of Bengal, the places referred to by Mr. Beveridge all occur on Gastaldi's "Tertia Pars Asiæ" (1561), of which a facsimile was given by Nordenskiöld in his "Periplus." The 1548 map of India by Gastaldi naturally showed a less advanced stage of knowledge, though itself an improvement on its predecessors. The earlier charts, like Cantino's and Canerio's (1502), though still more rudimentary, were themselves much in advance, as regards the delineation of the

Indian Peninsula, of the more or less speculative productions in vogue in their time. Ignazio Danti's name, it may be observed in conclusion, has quite recently been once more brought into notice in connection with the Toscanelli-Columbus controversy; M. Vignaud ("Toscanelli and Columbus," English edition, 1902, p. 44) branding as a downright forgery the erroneous statement regarding the correspondence of the two famous men which found its way into his 1571 edition of the "Sphæra Mundi" of Sacrobosco.

EDWARD HEAWOOD.

1, *Savile Row, W.*
August 7th, 1903.

NOTICES OF BOOKS.

TEXTES RELIGIEUX ASSYRIENS ET BABYLONIENS. Transcription, traduction, et commentaire, par FRANÇOIS MARTIN. Première Série. (Paris : Letouzey et Ané, 1903.)

The religion of the Babylonians and Assyrians is at present one of the most attractive studies of the science of Assyriology, and to it many well-known specialists have turned their attention, as several books noticed of late in the Journal of the Royal Asiatic Society testify. This is partly due to the fact that there is a wealth of material available (some of which has not been thoroughly studied), and perhaps in some measure to the attention which has been drawn to it by Professor Fried. Delitzsch's lectures, in which he boldly stated that the monotheistic idea, notwithstanding the gross polytheism of their religious system, had already, at an exceedingly early date, taken root in the country.

This, however, is not the subject of the book now before us—it is not a disquisition upon any section of the religion of the Babylonians and Assyrians, but simply a series of translations of inscriptions, mostly those copied and published by Professor Craig, of the University of Michigan, in 1895.[1] They are all texts of a more or less difficult nature, and are sometimes very defective. The author, however, has conferred a real service upon the study of these inscriptions,

[1] *Assyrian and Babylonian Religious Texts*, by James A. Craig, vols. i and ii. Leipzig, 1895 and 1897.

not only by issuing a translation of them, but by publishing the corrections made by M. Virolleaud, who, however, was not able to see them all.

The texts translated consist of prayers, hymns, psalms, litanies, supplications, etc., to various Babylonian and Assyrian gods and goddesses, including the well-known acrostic hymn published by Professor Strong, from my copies, after he had revised them. Of special interest, however, are the ritual tablets, which refer to the functions of the *barû* or 'seer,' the *âšipu* or 'enchanter,' etc. Other texts given are incantations, dedications to deities, and appeals to the gods for counsel.

One of the prettiest of the compositions translated is the Oracle of Ištar of Arbela to Aššur-banî-âpli, king of Assyria. It resembles in many things the Oracles to Esarhaddon,[1] of which the author of this notice gave translations in the first and second series of the *Records of the Past* (1875 and 1891). The occasion was apparently that when the nations of the north and east were attacking Assyria, and, as in the case of Esarhaddon when about to depart, apparently, for Armenia, the cry of the Pithia to her royal master was *lâ ṭapallaḫ*, "Fear not." The kings of the countries around are represented as urging each other to march against Aššur-banî-âpli, who had imposed his (? will) upon their fathers and grandfathers, and over whom they expected to obtain an easy victory. References to Elam and Gomer follow this, showing what the occasion was, and farther on there is an enigmatical reference to Egypt, introduced by the words *Ḫallalatti engurati*. This line is followed by the words: "Thou askest thus: 'What is *Ḫallalatti engurati?*' *Ḫallulatti* enters Egypt, *engurati* come forth." Naturally these words are still more of a riddle to us than to the ancient Assyrians.

Another text referring to Aššur-banî-âpli is a consultation of the god Šamaš as to whether the arms of the Assyrians would have success in recovering the cities which had been taken by the Armenians. The sun-god, as the deity who saw

[1] A similar oracle to Esarhaddon forms No. xiii in the book.

all that happened on earth, was apparently regarded as the god best able to make a prediction upon the subject, and it is on this account that he was appealed to. This inscription, which is very much like those of Aššur-banî-âpli's father Esarhaddon upon the same subject, opens as follows :—

"Šamaš, great lord, of whom I inquire, answer me.

" Let Nabû-šarra-uṣur, the rabshakeh, go with the soldiers, the horses, and the forces of Aššur-banî-âpli, king of Assyria, all who are with him, to recover the strong cities of Assyria which the Manâa have taken. He is going,—whether by a good utterance, the salutation of friendliness, or by the making of war and battle, or by some work of cunning (which) someone, an official of all (those who) are (there), will devise, (and) will recover those strong cities,—thy great divinity knows."

The remainder of the text goes on to ask that a true oracle might be given, notwithstanding all the imperfections in the victims sacrificed, in the manner of offering, or in the vestment of the priest, etc. It is a very good specimen of this class of document, and the difficulties of the text are very well dealt with, though there is still much to be done in the way of elucidation.

The hymn to Merodach, in which someone among the gods (Martin makes it to be Merodach himself) smites the skull of the divine storm-bird Zû ; the hymns to Aššur (attributed to Sennacherib) ; to Nusku, who is especially invoked as the judge of righteousness ; to Gišbar (Gibil), the god of fire, who is likewise invoked as a judge (perhaps on account of trial by ordeal, but more probably because fire was used in connection with statues of various substances, such as wax and bitumen, and was supposed to affect the person represented by the statue in like manner as the statue itself was affected), with many other interesting texts, are included in this collection.

In all probability, however, the most interesting of the texts is one entitled "Prescriptions rituelles touchant les fonctions du Devin (*barû*)." A portion of this inscription was published as early as 1866 (*Cuneiform Inscriptions of*

Western Asia, vol. ii, pl. 58, No. 3), and has been studied by various scholars, including Zimmern, who pointed out that the king of Sippar mentioned therein, En-we-dur-an-ki, is none other than the Evedoranchos[1] of Berosos. According to that Babylonian writer, he was the seventh king of the antediluvian dynasty, and reigned for 18 *sari* (64,800 years) at Pantibibla. Dr. Martin asks whether Pantibibla, in the opinion of Berosos, was the same as Sippara (Sippar)? With this evidence before us, there cannot be two opinions, and it is worthy of note that Mr. Richmond Hodges, as early as 1876, in his edition of Cory's "Ancient Fragments," actually makes this identification, and as he does not quote his authority it may be supposed that it originated with him.

This king, the beloved of the gods Anu, Bel, and Aê, and worshipper of Šamaš in Ê-babbara, the great temple of the sun at Sippar, was a seer, and regarded as the founder of the order of seers, who were, like him, guardians of the decrees of Šamaš and Hadad. No one whose father was not of pure race, or who had any defect, could enter into this order, and the text is taken up largely with details concerning this and the ceremonies which the seers performed.

The notes on the texts are meagre, but there is a word-list (*Lexique: Choix de mots*) of 11 pages, and a list of names occupying 4 pages more. The introduction, pp. v–xxviii, contains an excellent analysis of the information contained in the inscriptions translated.

T. G. Pinches.

Babylonische Miscellen, herausgegeben von F. H. Weissbach. (Leipzig: Hinrichs, 1903.)

This, the fourth part of the *Wissenschaftliche Veröffentlichungen der Deutschen Orient-Gesellschaft*, is one of the most important publications of the year in the realm of Assyriology, and gives a number of texts of a historical, linguistic, or

[1] To be corrected thus. Edoranchus is the form in Eusebius.

religious nature. The following is a list of all the inscriptions contained in the book, whose contents, as will be seen, are varied enough:—

I. A new king of Isin (Sin-magir).
II. Upon the third Dynasty of Babylon (the ancestry of Kuri-galzu, etc.).
III. A new king of the Coastland (Ulaburariaš).
IV. The Bas-relief and inscription of Šamaš-rêš-uṣur (ruler of Suḫi and Maer).
V. An inscription of the Assyrian king Adad-nirari I from Babylon.
VI. An inscription of Marduk-nadin-šum.
VII. An inscription of Aššur-âḫa-iddina (Esarhaddon).
VIII. A Cylinder-inscription of Aššur-banî-âpli (Assur-banipal).
IX. A new text of Nabopolassar.
X. A fragment of the Bisutûn (Behistun) inscription.
XI. A new fragment of the Syllabary S^{b}.
XII. The Ritual at the rebuilding of Temples.
XIII. A Hymn to Merodach in the form of a Litany.
XIV. An Amulet against the demoness Labartu.
XV. Document concerning the sale of an Estate.
XVI. Concerning the Period of the Conquest of Babylon by Darius Hystaspis.
XVII. An Astronomical Tablet.

The work has, as frontispiece, the Bas-relief on the stone of Šamaš-rêš-uṣur, and is accompanied by 15 plates of inscriptions.

In No. II Meli-šiḫu is called "son of Kuri-galzu," a statement which is of importance for the chronology of the Babylonian kings in the fourteenth century B.C. The text upon which it bears is the Babylonian Chronicle, published in the Journal of this Society for October, 1894, pp. 807–833. In that inscription the Babylonian king, whose name I have read Kadišman-Muruš,[1] but whose name is generally read

[1] So read on account of the characters of which it is composed having the values indicated by these syllables, and because of the name Kara-Murdaš (Kara-ḫardaš), which the Synchronous History substitutes.

Kadašmanḫarbe in Germany, is stated to be son of Kar-indaš, son of Muballiṭat-Šerûa, daughter of Aššur-uballiṭ, king of Assyria. As he is mentioned lower down as Aššur-uballiṭ's daughter's son, Kar-indaš would seem to have been the husband of Muballiṭat-Šerûa, and therefore son-in-law of the Assyrian king. Šu-zigaš, who had killed Kadašmanḫarbe (Kadišman-Muruš), was deposed and put to death by the Assyrian king, who, according to the Synchronous History, placed upon the Babylonian throne Kuri-galzu, a youth, son of Burnaburiaš.

Aware of this statement of the Assyrian record, I had restored my free rendering (p. 824) of the last mutilated line of col. i of the Babylonian Chronicle in such a way as not to come into conflict with it. It is possible, however, to insert in the Chronicle, as Winckler does, the name of Kuri-galzu, who is then made to be the son of Kadašmanḫarbe (Kadišman-Muruš). This and the other difficulties caused by the contradictions between the Babylonian Chronicle and the Assyrian Synchronous History Dr. Weissbach sets himself to explain, and the succession of the kings, as given by him, comes out as follows:—

Kadašman-Bêl (= Kadašmanḫarbe I?)—Kuri-galzu I—Burnaburiaš — Kara-indaš II — Kadašmanḫarbe II — Nazibugaš (Šuzigaš) — Kuri-galzu II — Nazimaruttaš — Kadašman-Turgu.

With this my own theory corresponds, and there is no doubt that it is correct, but the question of parentage will only be set at rest by the discovery of other inscriptions bearing upon it.

In the case of the new king of the coastland (III) it is noteworthy that in Ulaburariaš, son of Burnaburariaš, we have, as pointed out by Dr. Weissbach, names of the same character as those of the third dynasty of Babylon, the former being another form of Ulamburiaš, and the latter of Burnaburiaš, though his identity with the Burnaburiaš of the list given above is "a mere possibility." This inscription gives occasion to the author to insert a history of the coastland, as far as it is at present known, to which

may be added, that there was to all appearance an earlier ruler named Ine-Tutu (*Transactions of the Victoria Institute*, 1895–96, pp. 62, 65, 89), who, however, seems to have been a usurper.

The text of the ruler of Suḫi and Maer (IV) is of special interest, because very little concerning these states and their rulers is known. They lay, to all appearance, somewhere near the point where the Ḫabûr runs into the Euphrates, and are mentioned in the early inscriptions of Babylonia, the date at which they ceased to exist as independent or semi-independent states being uncertain. As Šamaš-rêš-uṣur is not called king, but simply governor, it is clear that he acknowledged the overlordship of some other power, but whether this power was Babylonia or Assyria does not appear. In all probability he was practically independent, for he not only omits all reference to an overlord, but also dates his inscription in the 13th year after his own accession.

The following are the contents of the inscription:— The subjection of the people of Tu'mānu; the repair of the canal of Suḫi; the planting of date-palms and the setting up of a throne in the city Ribaniš; the founding of the city Gabbari-ibnî; the planting of date-palms in three other cities, and the introduction of bees, for the sake of their honey and wax, into that district. The expression for honey-bee is not the usual one, *nubtu* or *zumbu ša dišpi*, 'honey-fly,' but *ḫabubēti ša dišpi*, the first word being plural, possibly from a singular *ḫabubtu* or *ḫabubitu*, which, if it be not a compound word, must come from the root *ḫabābu*, one of the meanings of which is 'to make a noise.' *Ḫabubēti* was therefore probably the word for large flies in general, which would then be so named as 'hummers.' An account of the historical references to Suḫi and Maer is appended.[1]

[1] In all probability the earliest inscription of any length referring to the district is that published in *Cuneiform Inscriptions from Babylonian Tablets*, pt. iv, pls. 1 and 2. This text, which *may* be as old as 2000 years B.C., or as late as the fifteenth century B.C., speaks of a revolt raised by Zimri-êdda (surely not one of the two personages of that name mentioned in inscriptions found at Tel-el Amarna?), seemingly in some place dependent on Babylon,

The reliefs on this stone show the goddess Ištar, the god Hadad, and the governor of the land, Šamaš-rêš-uṣur. Nos. VI and VII, which are cylinders or long beads dedicated to Merodach, also furnish us with the Babylonian conception of their gods. They are engraved respectively with images of Merodach and Hadad.

Passing over Aššur-banî-âpli's inscription, which belongs to the period when he had not yet fallen out with his brother Saosduchioos, we come to the new text of Nabopolassar, which Dr. Weissbach argues to have been one of the earliest of his reign, he not having assumed as yet the full titles of the kings of Babylon.[1] Interesting in the extreme is his reference to the heavy yoke of the Assyrians, whose foot he had withheld from the land of Akkad, and whose yoke he had caused to be thrown off.

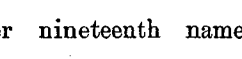
The fragment of the inscription of Behistun contains part of the Babylonian text, corresponding with that published by Sir Henry Rawlinson in the *Cuneiform Inscriptions of Western Asia*, vol. iii, pl. 39, l. 55–pl. 40, l. 72, completing many passages, which, however, can also be restored from the more perfect Old Persian and Susian texts.

No. XI, the duplicate of the Syllabary known as S^b, is of considerable importance from a lexicographical standpoint, and supplements in many ways the copies hitherto published. Interesting are the three Sumerian readings of — Uri = Akkadû, 'Akkad'; Ari = Amurrû, 'the land of the Amorites'; and Tilla = Urṭû, 'Ararat.' In connection with the character , Sumerian *zizna*, Semitic *binîtum*, rendered '? Zwillingsgeburt ?,' it is noteworthy that a tablet, of which I do not know the number,[2] after the words

"when Sin-ikîša^m, the Suḫite envoy, dwelt in the Suḫite fortress," and mention is made of certain people who had returned from Maer. The West Semitic names in this text are of some interest.

[1] Dr. Weissbach points out, in discussing No. XV, which is dated in Nabopolassar's 19th year, that there also the king's title is wanting.

[2] Not having been allowed access to the collections for many years before quitting the British Museum.

niššulāti and *binâti*, gives this character twice, with the explanations *nimšulum* and *biniti* (the latter being the oblique form of *binitum* in *i*). If *nimšulum* and *niššulāti* (for *nimšulāti*) come from *mašālu*, 'to be like,' the meaning of 'twin-birth,' or something similar, would seem to be the right one. The goddess called 'the lady of the gods' has, as her nineteenth name,  , Nin-zizna, 'the lady of double birth.' She was the great creatress, and one of her names was Aruru, who aided Merodach to create man at the beginning of the world (Journal of the Royal Asiatic Society, 1891, p. 395, l. 1). Dr. Weissbach's restoration of the value of as *sukud* is correct.[1]

No. XVI is a document referring to deliveries of meal, and is dated the 6th day of Tebet in the accession year of Darius Hystaspis, a date which, the author points out, reduces the length of that king's siege of Babylon by six months, i.e. 14 months instead of 20, its length according to Herodotus.

Every student interested in the antiquities of the ancient empires of Babylonia and Assyria, will welcome this addition to our knowledge of the ancient Semitic East. It will probably be a long time ere that storehouse of ancient lore is exhausted, and whilst congratulating Dr. Weissbach upon these noteworthy contributions, which fill up so many gaps, all readers will express the hope that the learned world will soon see more contributions of the same importance from his pen, and will wish success to the German explorations, as well as to all engaged in the same work on the sites of the ancient cities of Babylonia and Assyria.

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[1] According to the traces in S^{b} and SP. II, 982, the Sumerian pronunciation of this character with the meaning of *naklu*, 'artistic,' is *galam* ( ).

IN LANDE DES EINSTIGEN PARADIESES, ein Vortrag von FRIEDRICH DELITZSCH, mit 52 Bildern, Karten, und Planen. (Stuttgart: Deutsche Verlags-Anstalt, 1903).

This is a story of travel and discovery such as the leader of the Assyriological world well knows how to tell, and the enthusiasm with which he writes is such that the reader is carried away, and can almost imagine that he witnesses himself the things described. The discomforts and the pleasures of the journey, the scenery, the present manners and customs of the people, compared with those of the ancient Babylonians, are all depicted as by one gifted with unusual power of observation. Typical is the following:—

"No Arab knows how old he is, which is very pleasant for the nose-ring bedecked beauties who live there. When I asked a young Arab how old he was he shook his head. Then he erected his thumb and said, 'In that year the palms there were planted, in that year (raising the index-finger) came Moosyoo Bootroos (Monsieur Peters) over the sea; in that year (holding up the second finger) such and such a man was Wali-pasha in Bagdad—and in that year (showing the third finger) I came.' As Professor Peters[1] began the excavations at Niffer in 1889, it could easily be calculated that the young man was 13 years old. Exactly in this way, after prominent events, the old Babylonians, about the time of Hammurabi, indicated the years—Year when the city of Isin was captured, year the throne of Merodach was set up in E-sagila, etc. The art of medicine has made no progress among the aboriginal population since the time of the Babylonians. If an Arab has headache, a glowing hot bone of a dog, with which he burns himself upon the forehead, serves as his megrim-pencil, and bodily pains are treated in exactly the same way. For the healing or checking of eye-diseases the Arabs swallow seven pomegranate blossoms, for the holiness of the number seven still survives. And when we, on the 19th of July, had pitched our tents on the bank of the Euphrates near the little village

[1] See the J.R.A.S. for 1898, pp. 183, 186–188.

of el-Khidr, we saw, as night came on, a burning light swimming on the stream, and in response to our question as to what it meant, received the answer: Every village which this light passes will be free from fever during the year. It is the power of the fire-god, which, likewise according to old Babylonian belief, banishes all evil powers."

It seems to be well proved by the German excavations that Herôdotus's indications as to the great size of the city of Babylon are rather exaggerated. Delitzsch says "the extant remains of Babylon prove clearly that the circuit of the Babylonian capital only amounted to 15 kilom. Babylon was therefore about as large as Munich or Dresden —a very considerable size for an Oriental city, especially if we consider that to the city itself were attached in addition, suburbs with extensive plantations."

The plans and photographs of the ruins are excellent, though sometimes the latter are wanting in sharpness. The Ištar-gate, with the men at work, and the glazed brick reliefs of bulls and dragons, are of special interest.

T. G. PINCHES.

REV. G. A. COOKE, M.A. A TEXT-BOOK OF NORTH SEMITIC INSCRIPTIONS, MOABITE, HEBREW, PHŒNICIAN, ARAMAIC, NABATÆAN, PALMYRENE, JEWISH. pp. xxiv and 407, with fourteen plates. (Oxford: Clarendon Press, 1903. 16*s*. net.)

Out of the vast mass of Semitic inscriptions from various countries and of different ages, scattered through many costly and often inaccessible periodicals and publications, the author of this Text-book has collected a certain number, and has grouped them together under the common appellation of North Semitic. For the sake of clearness and comprehensiveness this name seems to be very well chosen, for all the nations whose literary remains in clay and stone are here recorded belong to the northern portion of Asia Minor, and are sharply divided off from the Southern Semitic

nations. The philological affinities among the languages of these peoples are also very close to one another. Upwards of 150 inscriptions have been here reproduced, and also a number of seals and inscriptions from Jewish and other coins, ranging all from the ninth century B.C.—i.e. if the Moabite Stone be not a forgery—down to the fifth century A.D., covering a period of more than a thousand years, and representing many a strange aspect of ancient civilization. Not much of an historical character can be gleaned from these inscriptions, but they introduce us into the home life and the peculiar cult of these peoples, addicted to all kinds and forms of polytheism. Many a god appears here in the votive tablet or monument of his worshipper who was otherwise known only by the incidental mention in the Bible or by some stray note of Greek and Latin writers. The yield for Semitic philology is far more rich. The inscriptions add considerably to our knowledge of the languages spoken by these various Semitic peoples. Many a word and root which occurs rarely in the Bible appears here to be the common word used in those languages, and then it is found in the inscriptions in a more archaic form than in other extant literary monuments of those nations; they are often dialectic or ancient forms difficult to determine. They are written, like Hebrew, without any vowels or vowel signs, and in most cases the words are not separated from one another either by dots or by the peculiar form of the final letters, as in the square characters of the Hebrew writing; more often than not the inscription is mutilated or otherwise damaged. All these contribute to increase the difficulties of reading them. The names of the scholars who have attempted to decipher them is legion, and they are not often found to agree in the reading of the words and in the interpretations which they place upon these fragmentary records. Amidst that maze of difficulties the Rev. Mr. Cooke has found the *via media*, and the result is presented to us in this beautifully worked out book. The inscriptions are grouped in the following order: — Moabite, Hebrew (Siloam). Phœnician: from

Phœnicia proper, then from Cyprus, Egypt, Attica. Phœnician—Punic: Malta, Sardinia, Gaul, North Africa. Phœnician—Neo-Punic: Tunis, Algiers, Sardinia. Aramaic: North Syria, notably the series of Zengirli, Babylonia, Asia Minor, Arabia, and Egypt. Nabatæan: North Africa, Moab, Damascus, Hauram, Italy. Nabatæan—Sinaitic: Palmyrene. Jewish: Bene Hezir and Kefr Bir'im. Coins: Aramaic, Phœnician, and Jewish; and finally seals and gems. All these inscriptions have been transcribed from their original archaic script in Hebrew square characters, each inscription is translated into English, and the translation is accompanied by an exhaustive exegetical and philological commentary, in which all the points raised by them are carefully examined, the opinions of scholars weighed and sifted, the historical and philological difficulties laid bare, and everything noted that is of an archæological interest. The old classical writers are often referred to for the elucidation of particular names of gods or forms of worship. By referring the reader backwards and forwards, one text is explained through the other, and the scattered fragments are more closely brought together. The selection of inscriptions has been made with great skill, for the most important are here, and the record has been brought down to the most recent discoveries (so far down, in fact, as 1903). Six indexes follow, viz., North Semitic, Arabic, Syriac, Greek, Biblical references, and a general index. Appendix I: The Phœnician inscriptions of Bostan esh-Shech found in Sidon in 1900 and 1901. II: Aramaic Papyrus from Elephantine, reprinted from the Proceedings of the Society of Biblical Archæology of 1903, bringing the book down almost to the very day of its publication. Fourteen plates, admirably executed, give us faithful facsimiles of four Phœnician, two Aramaic, one Nabatæan, and one Palmyrene inscription, as well as reproductions of Cilician, Phœnician, and Jewish coins. Seals and gems fill plate xi, and the remaining three plates contain comparative tables of Semitic alphabets. Thus everything that the student can desire has been offered to him by the author in an excellent manner. He cannot have

a better guide or a more reliable teacher than Mr. Cooke. The book, in its completeness and skilful arrangement, surpasses even Lidzbarski's Handbuch, and the author shows greater caution and a more graceful recognition of the merits of others than is often the case with epigraphists. Though acknowledging the services which others have rendered in the difficult task of reading and interpreting these inscriptions, Mr. Cooke preserves his independence of judgment, and where he differs from them he presents his own interpretation, based upon weighty arguments, proving that he has completely mastered the subject, of which he will henceforth be one of the most authoritative exponents.

M. G.

NOTES OF THE QUARTER.

(July, August, September, 1903.)

I. Obituary Notices.

Henry Cassels Kay.

Born April 21, 1827. Died June 5, 1903.

Many personal friends, as well as admirers of genuine scholarship, will have heard with profound regret of the unfortunate carriage accident which cost Mr. Henry Cassels Kay his life in the early summer of the present year. Few, however, even of his Kensington neighbours and acquaintances, could have realized in that calamity how distinguished an Orientalist had passed away from their midst. The patient research which had long characterized his voluntary labours in Arabic lore and literature could only be appreciated by workers in the same field; and even had such studies been of a nature to secure popular recognition, he would have been the last man to put forward his claims to distinction. But that he was eminently qualified to rank with the foremost of Arabists is a fact which may be readily demonstrated by the testimony of proficient contemporaries both at home and abroad.

Henry Cassels Kay was of Scotch descent, and was born in 1827 at Antwerp, where his father, a much respected merchant, had settled for purposes of business. His father having died at a comparatively early age, Henry, while little more than a boy, went to Egypt, where after a period

of trial and discouragement he obtained a clerkship in the house of Briggs & Co., the leading merchants of Alexandria, and speedily made his mark by dint of natural ability, diligence, and usefulness. But he was not a man to confine himself to one walk only, at a time when there was a legitimate call for the display of his talents in a wider range. For a trustworthy summary of his employment during the memorable period of the Indian Mutiny, we turn to that contained in an extract from the pages of our leading journal,[1] which supplies, as will be seen, information peculiarly its own :—

"In the year 1856 he was appointed the *Times* Correspondent in Alexandria—at that time a position of much importance, not because of Egyptian politics, but because all the *Times* news from Alexandria, China, and India was addressed to the Alexandria Correspondent, who was charged with making a summary of it, which he despatched by the fastest steamer to Constantinople, Cagliari, Malta, Trieste, or the nearest point from which it could be telegraphed to England. On the outbreak of the Indian Mutiny the position became of increased importance. Every effort was made by the *Times* to obtain information ahead of that received by the Government. Mr. Kay was authorized to engage a special engine from Cairo, to charter a steamer, and to send over a special courier. That he was in the main successful may be judged from the following extract from a letter addressed to him by Mr. Mowbray Morris :—'Your plans for giving us the earliest intelligence brought by the last India and China mails were so good that we received the news, viâ Constantinople, on the 21st, four days in anticipation of the ordinary summary by Trieste. The Naples route also anticipated the Trieste by two days. For your activity and good judgment in this matter you deserve our thanks, and I am extremely well pleased to know that, just at the time that we require a good agent at an important point, we have had the good luck to secure one.'"

[1] The *Times*, 9th June, 1903.

In 1863—when the anxious days of the Indian Mutiny had been succeeded by a period of comparative repose, and competent officers of the Indian Government had seriously undertaken the establishment of telegraphic communication between Europe and India, irrespective of a Red Sea cable—Mr. Kay left the land of the Pharaohs and their less archaic successors, the Khedives, to become the London representative of Messrs. Briggs & Co., and subsequently returned to Egypt as a partner in the house of Tod, Rathbone, & Co. In 1875 he retired from business, and some years later, having settled in London, was appointed a director of the Bank of Egypt. He quitted one department of work, it is true, at a time of strong middle-age, but it was only to return to his own labour of love—one for which he was richly qualified by taste and inclination, and for which he had been incidentally trained by a useful, if hard experience—the study and *exploitation* of the marvellous Arabic language and literature.

In a recent number of the *Athenæum* allusion is made to Mr. Kay's contributions to the Royal Asiatic Society's Journal. Among them are noted:—"Al Kāhirah and its Gates," "Inscriptions at Cairo and Burj uz Zafar," "Notes on the History of the Banu 'Oḳail," together with "Notes on Arabic Inscriptions in Egypt and at Damascus"—subjects which deeply interested him, and in the treatment of which his skill as an epigraphist found an excellent opportunity for exercise. But his chief performance, rightly styled by Mr. Lane-Poole his *magnum opus*, was 'Omāra's History of Yaman published in 1892, some ten years after he had joined the Asiatic Society, and while a member of its Council. This volume, described in detail as an early mediæval history of the country by Najm ad Din 'Omārah al Ḥakami, contains also the Abridged History of its Dynasties, by Ibn Khaldūn, and an Account of the Karmathians of Yaman, by Abu 'Abd Allah Bahā ad-Din al-Janadi, the original texts with translations and notes. If we dwell mainly on this valuable publication—here presented to the English reader in plain Anglo-Saxon with accompanying notices of 'Omārah's co-religionists and

cotemporaries—we do so because it is one which has attracted a considerable share of attention abroad and at home, and because it is the only work by which we can fairly judge of the capabilities of its interpreter. Indeed, it could hardly have been achieved at all but at a period of respite from worldly business. Mr. Kay's personal knowledge of Egypt and the Egyptians, to say nothing of the several languages current in Alexandria as well as on the shores of the Mediterranean generally, enabled him to hold converse with the more learned members of the Arab community besides the Turkish-speaking employés of the country to whom, in spite of a certain conventional education, the methods of native grammarians and lexicographers are not always intelligible. So that when appealed to as an authority in questions of native speech, he could be regarded as a reasonably safe referee. How important is the definition of local, in relation to book Arabic, must be well known to those of our civil and military officers who have taken up this subject as a serious study. Put, for instance, one who has passed his examination in Arabic at a classical Indian centre, and set him to exercise his interpretership among the wild tribes of Maskat and the Persian Gulf, and it will soon be seen how his so-called book knowledge qualifies, if it do not actually disqualify him, for the due performance of his duty.

What were the opinions of the profounder scholars on Mr. Kay's qualifications in literary Arabic may be judged by two or three extracts from letters addressed to Mrs. Kay, or her husband in his lifetime, by the bearers of well-known names at home and abroad. We have been kindly permitted to make use of them at discretion.

The eminent scholar Professor de Goeje, of Leyden University, writes that he admired in him (Kay) the true scholar who spared no pains to find the truth, and was faithful in little things as well as in important ones, knowing that small causes may have great effects. While his reading and interpretation of difficult passages were generally sound, he never hesitated to accept another version of a disputed passage when convinced that it was preferable, while if his

opinion were attacked on insufficient grounds he was well able to stand his own.

The following two extracts are from letters written by the late M. Henri Lavoix, of the Bibliothèque Nationale, and M. Sauvaire, author of the "Histoire de la Numismatique et de la Métrologie Musalmane," acknowledging receipt of the "History of Yaman," soon after publication. The first is valuable as testifying not only to Mr. Kay's ability as an Arabic scholar but also to his talent as a numismatist. He wrote :—

"Vous ne vous doutez pas, dans quelles circonstances heureuses votre livre m'est arrivé. Je viens de finir la description des monnaies Fathimites et Ayoubites du Cabinet. Les relations de l'Égypte avec le Yemen m'inquiétaient beaucoup. Vous voici avec une histoire des plus précieuses et la question est élucidée. Vous m'avez donc epargné beaucoup de recherches et vous devez voir par moi, combien votre livre est utile. Il est bien venu à bon moment."

M. Sauvaire said :—

"En revenant de voyage je trouve le superbe volume que vous avez eu la bonté de m'envoyer. Bien que je n'aie pas encore le temps de le lire, je m'empresse de vous remercier et de vous féliciter. Tout en coupant les feuilles du livre je n'ai pas résisté au désir de le parcourir, et ce que j'ai vu, m'a montré la parfaite loyauté de votre procédé scientifique, les consciencieuses recherches, les prudentes déductions, en un mot—l'amour de la verité. Ceux qui ont le bonheur de vous connaitre personnellement ne seront nullement surpris de retrouver ces qualités dans votre ouvrage. J'éprouve une grande joie de voir le résultat de votre labeur, et je pense que vous devez vous-même avoir une grande satisfaction. La droiture de votre esprit vous a fait trouver le vrai, même dans vos hypothèses, c'est ce que je conclus de quelques remarques sur Hamdan, où vous vous rencontrez avec le jugement général exprimé par Springer dans son nouveau travail dans le *Zeitschrift der deutschen Morgenland Gesellschaft.*"

To the above we would add the testimony of the well-known Professor of Arabic at the Dublin University, Mr. Stanley Lane-Poole :—

"Apart from his Arabic scholarship and knowledge of Arabic numismatics, Mr. Kay's talent for Arabic epigraphy was remarkable. I should say that his chief delight was in Arabic inscriptions. I well remember, when he and I were together at Cairo in 1883, and used to wander about the streets together, it was impossible to induce him to pass a mediæval inscription until he had copied it into his note-book. It was then that he took the paper squeeze of the fine Kufic inscription over the Bāb-en-Naṣr, from which the plaster cast was made which is now exhibited in the Victoria and Albert Museum at South Kensington. It was a work of great labour. Scaffoldings had to be erected, and Mr. Kay himself superintended every detail. He afterwards published the inscription in the Journal of the Royal Asiatic Society. It was a notable service to Arabic epigraphy. I well recall our visit to the Great Pyramid in that year, in company with the Hon. George Curzon (now Lord Curzon of Kedleston) and the Malorties. Mr. Kay showed no special interest in the Pyramid, which he had doubtless often visited before, but I heard him calling to me from the King's Chamber, 'Do come and see this Arabic inscription.' In my opinion he was the finest epigraphist in England, and his only rival abroad was my friend M. Max van Berchem, with whom he had a controversy on the Bāb-en-Naṣr inscription.

"Mr. Kay was so modest and unassuming in matters of scholarship that one had some difficulty in realizing how thorough his work was. He always seemed to depreciate himself. Yet he was really a true scholar who worked for learning alone. His edition of 'Omārah's *Yaman* is proof enough. It would have been easy to make it an interesting literary narrative of an obscure chapter of history. But Mr. Kay took it from the scholar's point of view. He cared nothing for popularity; he simply edited his texts and annotated them as far as historical research enabled

him. The result is a work which no student of Arabian history can afford to neglect. Apart from 'Omārah and his publication of Arabic inscriptions, Mr. Kay's chief contribution to Arabic historical research was his valuable essay on the 'Okaylīs, which is a standard authority. His articles on the Gates of Cairo and other archæological subjects connected with the city he loved are all of the first importance to students."

On first receipt of Mr. Kay's 'Omārah, Mr. Stanley Lane-Poole had written:—"It is a splendid piece of scholarly work in a little known branch of history. I have not only read it through, partly more than once, but already sent off a review of it; so I do not write without a fair acquaintance. . . . . It will rank among the first class editions of Arabic texts in English, and you have every reason to be proud of it."

Mr. Kay formed a valuable collection of coins illustrative of the history of the Muḥammadan dynasties. He also took a deep interest in Arabic art and architecture, and though his tastes were those of the student rather than the collector of *objets d'art*, he found pleasure in fitting up a room in his house with ancient Oriental tiles, woodwork, etc., as a replica of a Cairene apartment of the old style, a work in which his friend Sir C. Purdon Clarke, of the South Kensington Museum, gave valuable assistance.

In 1859 he married Jane Anne, daughter of James Edmonstoune Aytoun, of Fife, and a cousin of Professor Aytoun; he leaves one son.

Member of the Council and serving on more than one committee of the Royal Asiatic Society, Mr. Kay was also a member of the Numismatic Society, and for some time a Fellow of the Royal Geographical Society. He was up to the time of his death a member of the Athenæum Club.

Acknowledgments are due to those who have kindly assisted the compiler in putting together this brief and imperfect memorial of a distinguished scholar and esteemed friend.

F. J. G.

London, 14th September, 1903.

II. Notes and News.

MEDAL FUND: MADRAS CONTRIBUTION.

On the occasion of the death of Maharajah Sir Gajapati Rao, K.C.I.E., who gave the munificent donation of £300 towards the Medal Fund of this Society, a letter of condolence was sent in the name of the Society in the following terms:—

"India Office, Whitehall, S.W.
30th June, 1903.

"Dear Mr. Sim,—I see by the Indian papers that Maharajah Sir Gajapati Rao of Vizagapatam, K.C.I.E., recently died. I have thought that, as this nobleman was not only a member of the Royal Asiatic Society, but also gave a most liberal donation towards the Public School Prizes and Medal Fund, I might be pardoned if I venture in the name of the Council to ask you kindly to convey to his family an expression of sympathy with them in their bereavement.

"Very truly yours,
A. N. Wollaston.

"*H. A. Sim, Esq., C.I.E.*"

"Uplands, Waltair.
2nd August, 1903.

"Dear Sir,—Mr. Sim sent me your kind letter of sympathy with us in our grief on the death of my revered father-in-law, Maharajah Sir Gajapati Rao, and I communicated the message of condolence to Maharani Lady Gajapati Rao and his daughter the Rani Sahib of Wadhwan, who desire me to convey to you their best thanks for your and the Royal Asiatic Society's esteemed sympathy, which has comforted us very much. Though the philanthropy of my father-in-law is well known, that the Royal Asiatic Society in England, of which you are an honourable member, should take such good note of it, and think it fit to send us a kind expression of your appreciation of it, and your good-natured sympathy with us in our grief, are unmistakeable proofs of the high-mindedness that characterizes you, and kindly accept our heartiest thanks for the same, and communicate them to the noble Society.

"Yours respectfully,
(Signed) V. Varabhadraraju of Kurupam.

"*A. N. Wollaston, Esq., C.I.E.*"

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In witness whereof the Seal of the Royal Asiatic Society is hereto affixed this sixth day of November One thousand nine hundred.

The Schedule above referred to.

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For facility of reference this Appendix will be published with each forthcoming number of the Journal.

TRANSLITERATION

OF THE

SANSKRIT, ARABIC,

AND ALLIED ALPHABETS.

THE system of Transliteration shown in the Tables given overleaf is almost identical with that approved of by the International ORIENTAL CONGRESS of 1894; and, in a Resolution, dated October, 1896, the Council of the ROYAL ASIATIC SOCIETY earnestly recommended its adoption (so far as possible) by all in this country engaged in Oriental studies, "that the very great benefit of a uniform system" may be gradually obtained.

I.

SANSKRIT AND ALLIED ALPHABETS.

अ	*a*	ओ	*o*	ट	*ṭ*	ब	*b*
आ	*ā*	औ	*au*	ठ	*ṭh*	भ	*bh*
इ	*i*	क	*k*	ड	*ḍ*	म	*m*
ई	*ī*	ख	*kh*	ढ	*ḍh*	य	*y*
उ	*u*	ग	*g*	ण	*ṇ*	र	*r*
ऊ	*ū*	घ	*gh*	त	*t*	ल	*l*
ऋ	*ṛ*	ङ	*ṅ*	थ	*th*	व	*v*
ॠ	*ṝ*	च	*c*	द	*d*	श	*ś*
ऌ	*ḷ*	छ	*ch*	ध	*dh*	ष	*ṣ*
ॡ	*ḹ*	ज	*j*	न	*n*	स	*s*
ए	*e*	झ	*jh*	प	*p*	ह	*h*
ऐ	*ai*	ञ	*ñ*	फ	*ph*	ळ	*ḻ*

ं (*Anusvāra*)	*ṁ*	ऽ (*Avagraha*)	’
ँ (*Anunāsika*)	*m̐*	*Udātta*	´
ः (*Visārga*)	*ḥ*	*Svarita*	^
× (*Jihvāmūlīya*)	*ẖ*	*Anudātta*	`
ᳵ (*Upadhmānīya*)	*ḫ*		

II.

ARABIC AND ALLIED ALPHABETS.

ا at beginning of word omit; elsewhere . . . ـَ or ـٰ		ک . . . . *k*	اَ . . . . *ā*
		ل . . . . *l*	ِی . . . . *ī*
ب . . . . *b*	س . . . . *s*	م . . . . *m*	ُو . . . . *ū*
ت . . . . *t*	ش . *ṣ* or *sh*	ن . . . . *n*	
ث . *ṭ* or *th*	ص . . *ṣ* or *z*	و . . *w* or *v*	DIPHTHONGS.
ج . *j* or *dj*	ض *ḍ*, *dz*, or *z*	ه . . . . *h*	َيْ . . . . *ai*
ح . . . . *ḥ*	ط . . . . *ṭ*	ي . . . . *y*	َوْ . . . . *au*
خ . *ḫ* or *kh*	ظ . . . . *ẓ*		*wasla* . . . ـُ
د . . . . *d*	ع . . . . ـٔ	VOWELS.	*hamza* ـَ or ـٰ
ذ . *ḍ* or *dh*	غ . *ġ* or *gh*	ـَ . . . . *a*	*silent t* . . *ḥ*
ر . . . . *r*	ف . . . . *f*	ـِ . . . . *i*	*letter not pronounced* . . ـِ
ز . . . . *z*	ق . . . . *q*	ـُ . . . . *u*	

ADDITIONAL LETTERS.

PERSIAN, HINDI, AND PAKSHTŪ.	TURKISH ONLY.	HINDI AND PAKSHTŪ.	PAKSHTŪ ONLY.
پ . . . . *p*	ک when pronounced as *g* . . . . *ḳ*	ٹ or ټ . *ṭ*	څ . . . *ts*
چ . *c* or *ch*		ڈ or ډ . . *ḍ*	ږ . . . *ġ*
ژ . *ẓ* or *zh*		ڑ or ړ . . . *ṛ*	ڼ . . . *ṇ*
گ . . . *g*	ڭ . . . . *ñ*		ښ . . . *ksh*
پ . . . *ṣ*			
ز . . . . *ẕ*			

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	100	26	306	69	9	31	66	607
Transfers ...	+3	...	...	+1	...	+1	...	+5
	...	...	−4	−1	...	...	...	−5
Jan. 1st, 1903	103	26	302	69	9	32	66	607

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